

Safety Data Sheet

POLYTACK CA

Safety Data Sheet dated: 08/22/2024 - version 5

Date of first edition: 04/20/2017

1: Identification

Product identifier

Mixture identification:

Trade name: POLYTACK CA

Trade code: 9028253

Recommended use and restrictions on use

Recommended use: Adhesive

Restrictions on use: Not available

Supplier's details

Company: Polyglass U.S.A. Inc.

1111 West Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Phone: 866-222-9782

Responsible: RDProductSafety@mapei.com

Emergency phone number

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887

Emergency Transport CANUTEC (Canada) 1-613-996-6666

2. Hazard identification



Classification of the product

Flammable Liquids — Category 2

Skin irritation, Category 2

Eye irritation, Category 2A

Skin Sensitization, Category 1B

Carcinogenicity, Category 2

Reproductive toxicity, Category 2

Specific target organ toxicity following single exposure, Category 3

Specific target organ toxicity following repeated exposure, Category 2

Acute (short-term) aquatic hazard - Category 3

Chronic (long-term) aquatic hazard - Category 3

Highly flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

Suspected of damaging fertility. Suspected of damaging the unborn child.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

Harmful to aquatic life

Harmful to aquatic life with long lasting effects.

Label elements

Hazard pictograms and Signal Word



Danger

Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and

if swallowed.

H402 Harmful to aquatic life

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P260 Do not breathe mist/vapours/spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P312 Call a doctor if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P370+P378 In case of fire, use a dry powder fire extinguisher to extinguish.

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

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with applicable regulations.

Other hazards

None

Ingredient(s) with unknown acute toxicity

None

3. Composition/information on ingredients

Substances

Not Relevant

Mixtures

Hazardous components within the meaning of WHMIS 2015 and related classification:

List of components

| Qty | Name | Ident. Numb. | Classification | Registration Number |
|---------|---|--|---|-----------------------|
| 10-20 % | toluene; 1-Methylbenzene | CAS:108-88-3 EC:203-625-9 Index:601-021-00-3 | Flam. Liq. 2, H225; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3, H336; Repr. 2, H361; Aquatic Chronic 3, H412; Aquatic Acute 2, H401 | 01-2119471310-51-XXXX |
| 10-20 % | tert-butyl acetate; Acetic acid, 1, 1-dimethylethyl ester | CAS:540-88-5 EC:208-760-7 Index:607-026-00-7 | Flam. Liq. 2, H225; Acute Tox. 4, H332; STOT SE 3, H335; STOT SE 3, H336 | 01-2119449809-22-XXXX |
| 10-20 % | acetone; propan-2-one | CAS:67-64-1 EC:200-662-2 Index:606-001- | Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336 | 01-2119471330-49-XXXX |

| | | | | |
|---------|---|--|---|-----------------------|
| 10-20 % | n-hexane; hexyl hydride | CAS:110-54-3 EC:203-777-6 Index:601-037-00-0 | Flam. Liq. 2, H225; Skin Irrit. 2, H315; STOT RE 2, H373; Asp. Tox. 1, H304; STOT SE 3, H336; Repr. 2, H361f; Aquatic Chronic 2, H411 | 01-2119480412-44-XXXX |
| 1-2.5 % | 4-chloro-a,a,a-trifluorotoluene; chlorobenzotrifluoride | CAS:98-56-6 EC:202-681-1 | Flam. Liq. 3, H226; Carc. 2, H351; N.A. Aquatic Chronic 2, H411; Skin Sens. 1B, H317 | |

The actual concentration of the components listed above is withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose of safely.
- After contact with skin, wash immediately with soap and plenty of water.
- If skin irritation or rash occurs: Get medical advice/attention.

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 ophthalmologist immediately.
- Protect uninjured eye.
- Remove contact lenses, if present and easy to do. Continue rinsing.

In case of Ingestion:

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

In case of Inhalation:

- If breathing is irregular or stopped, administer artificial respiration.
- In case of inhalation, consult a doctor immediately and show him packing or label.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Most important symptoms/effects, acute and delayed

Eye irritation
Eye damages
Skin Irritation
Erythema

Indication of immediate medical attention and special treatment needed, if necessary

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

Treatment:

(see paragraph 4.1)

5. Fire-fighting measures

Suitable and unsuitable extinguishing media

Suitable extinguishing media:

- In case of fire, use a dry powder fire extinguisher to extinguish.
- CO2 or Dry chemical fire extinguisher.

Unsuitable extinguishing media:

- None in particular.

Specific hazards arising from the hazardous product

- Do not inhale explosion and combustion gases.
- Burning produces heavy smoke.
- Hazardous combustion products: Not available
- Explosive properties: Not available
- Oxidizing properties: Not available

Special protective equipment and precautions for fire-fighters

- Use suitable breathing apparatus.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Move undamaged containers from immediate hazard area if it can be done safely.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment.
- Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Limit leakages with earth or sand.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand
Retain contaminated washing water and dispose it.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Exercise the greatest care when handling or opening the container.
Do not use on extensive surface areas in premises where there are occupants.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
Wash skin thoroughly after handling.
See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.
Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
Store in a well-ventilated place. Keep cool.
Avoid direct exposure to sunlight.
Opened containers must be carefully resealed and kept upright to prevent leakage.
Flammable mixtures may accumulate within the headspace of containers at room temperature.
Storage at higher temperatures requires an appropriate evaluation of preventive and protection measures to be adopted.
Storage temperature must be defined on the basis of a proper risk evaluation. Refer to other sections for additional information.
Avoid accumulating electrostatic charge.
Keep away from food, drink and feed.
Electrical installations / working materials must comply with the technological safety standards.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Temperature of storage facilities must be adequately monitored to avoid hazardous conditions.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.
Safety electric system.

Storage temperature: Not available

8. Exposure controls/personal protection

Control parameters

Community Occupational Exposure Limits (OEL)

| | OEL Type | Country | Occupational Exposure Limit |
|---|----------|---------|--|
| toluene; 1-Methylbenzene CAS: 108-88-3 | EU | | Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm Skin |
| | ACGIH | | Long Term: 20 ppm A4, BEI - Visual impair, female repro, pregnancy loss |
| | MAK | GERMANY | Long Term: 190 mg/m ³ - 50 ppm |
| | OSHA | | Long Term: 200 ppm |
| | ACGIH | | Long Term: 20 ppm A4 - Not Classifiable as a Human Carcinogen;female reproductive damage;pregnancy loss;visual impairment |
| | OSHA | | Short Term: Ceiling - 300 ppm |

| | | | |
|---|-------|-------------|--|
| tert-butyl acetate; Acetic acid, 1,1-dimethylethyl ester CAS: 540-88-5 | EU | | Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm Behaviour Indicative Possibility of significant uptake through the skin |
| | MAK | AUSTRIA | Long Term: 190 mg/m ³ - 50 ppm; Short Term: 380 mg/m ³ - 100 ppm |
| | MAK | SWITZERLAND | Long Term: 190 mg/m ³ - 50 ppm |
| | MAK | GERMANY | Long Term: 96 mg/m ³ - 20 ppm |
| acetone; propan-2-one CAS: 67-64-1 | OSHA | | Long Term: 950 mg/m ³ - 200 ppm |
| | ACGIH | | Long Term: 50 ppm; Short Term: 150 ppm eye and upper respiratory tract irritation (listed under Butyl acetates, all isomers) |
| | MAK | AUSTRIA | Long Term: 96 mg/m ³ - 20 ppm; Short Term: 96 mg/m ³ - 20 ppm |
| | MAK | SWITZERLAND | Long Term: 240 mg/m ³ - 50 ppm |
| | MAK | AUSTRIA | Short Term: Ceiling - 96 mg/m ³ - 20 ppm |
| | EU | | Long Term: 1210 mg/m ³ - 500 ppm |
| | ACGIH | | Long Term: 250 ppm; Short Term: 500 ppm A4, BEI - URT and eye irr, CNS impair |
| | MAK | GERMANY | Long Term: 1200 mg/m ³ - 500 ppm |
| | OSHA | | Long Term: 2400 mg/m ³ - 1000 ppm |
| | ACGIH | | Long Term: 250 ppm; Short Term: 500 ppm A4 - Not Classifiable as a Human Carcinogen;CNS impairment;eye and upper respiratory tract irritation |
| n-hexane; hexyl hydride CAS: 110-54-3 | MAK | AUSTRIA | Long Term: 1200 mg/m ³ - 500 ppm; Short Term: 4800 mg/m ³ - 2000 ppm |
| | MAK | SWITZERLAND | Long Term: 1200 mg/m ³ - 500 ppm |
| | EU | | Long Term: 1210 mg/m ³ - 500 ppm Behaviour Indicative |
| | MAK | GERMANY | Long Term: 180 mg/m ³ - 50 ppm |
| | OSHA | | Long Term: 1800 mg/m ³ - 500 ppm |
| | ACGIH | | Long Term: 50 ppm Skin - potential significant contribution to overall exposure by the cutaneous route;CNS impairment;eye irritation;peripheral neuropathy |
| | EU | | Long Term: 72 mg/m ³ - 20 ppm Behaviour Indicative |
| | MAK | AUSTRIA | Long Term: 72 mg/m ³ - 20 ppm; Short Term: 288 mg/m ³ - 80 ppm |
| | MAK | SWITZERLAND | Long Term: 180 mg/m ³ - 50 ppm |
| | MAK | GERMANY | Long Term: 1 mg/m ³ |
| 4-chloro-a,a,a-trifluorotoluene; chlorobenzotrifluoride CAS: 98-56-6 | OSHA | | Long Term: 2.5 mg/m ³ |
| | ACGIH | | Long Term: 2.5 mg/m ³ "A4 - Not Classifiable as a Human Carcinogen" As Fluorides [RR-02792-9];"bone damage;fluorosis" As Fluorides [RR-02792-9] |

Biological limit values

toluene; 1-Methylbenzene
CAS: 108-88-3

Biological Indicator: Toluene; Sampling Period: Before last turn of the working week
Value: 0.02 mg/L; Medium: Blood

Biological Indicator: Toluene; Sampling Period: End of turn
Value: 0.03 mg/L; Medium: Urine

Biological Indicator: O-Cresol; Sampling Period: End of turn
Value: 0.3 MGGCREAT; Medium: Urine

Remark: Background

acetone; propan-2-one
CAS: 67-64-1
Biological Indicator: Acetone; Sampling Period: End of turn
Value: 25 mg/L; Medium: Urine
Remark: Not Specific

n-hexane; hexyl hydride
CAS: 110-54-3
Biological Indicator: Hexanedione; Sampling Period: End of turn; End of working week
Value: 0.4 mg/L; Medium: Urine

Biological Indicator: Hexanedione; Sampling Period: End of turn
Value: 0.5 mg/L; Medium: Urine

4-chloro-a,a,a-trifluorotoluene;
chlorobenzotrifluoride
CAS: 98-56-6
Biological Indicator: Fluoride; Sampling Period: Before turn
Value: 2 mg/L; Medium: Urine
Remark: Background; Not Specific

Biological Indicator: Fluoride; Sampling Period: End of turn
Value: 3 mg/L; Medium: Urine
Remark: Background; Not Specific

Predicted No Effect Concentration (PNEC) values

toluene; 1-Methylbenzene
CAS: 108-88-3
Exposure Route: Freshwater sediments
Remark: PNEC

Exposure Route: Soil
Remark: PNEC

Exposure Route: Marine water sediments
Remark: PNEC

Exposure Route: Fresh Water
Remark: PNEC

Exposure Route: Marine water
Remark: PNEC

Exposure Route: Intermittent release
Remark: PNEC

Exposure Route: Microorganisms in sewage treatments

acetone; propan-2-one
CAS: 67-64-1
Exposure Route: Freshwater sediments; PNEC Limit: 30.4 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 3.04 mg/kg

Exposure Route: Fresh Water; PNEC Limit: 10.6 mg/l

Exposure Route: Marine water; PNEC Limit: 1.06 mg/l

Exposure Route: Soil; PNEC Limit: 29.5 mg/l

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l

Derived No Effect Level (DNEL) values

toluene; 1-Methylbenzene
CAS: 108-88-3
Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Industry: 384 mg/m³; Consumer: 226 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 192 mg/m³

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Consumer: 226 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Industry: 384 mg/m³

acetone; propan-2-one
CAS: 67-64-1
Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Industry: 186 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Industry: 2420 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 1210 mg/m³

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 62 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Consumer: 62 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Consumer: 200 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Industry: 2420 mg/m³

Appropriate engineering controls

Not available

Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Use close fitting safety goggles, don't use contact lenses.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: blue

Odour: No data available

Odour threshold: No data available

pH: No data available

Melting point / freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: $-6\text{ }^{\circ}\text{C}$ ($21\text{ }^{\circ}\text{F}$)

Evaporation rate: No data available

Upper/lower flammability or explosive limits: No data available

Vapour density: No data available

Vapour pressure: No data available

Relative density: 0.92 g/cm^3

Solubility in water: No data available

Solubility in oil: 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

Explosive properties: No data available

Oxidizing properties: No data available

Solid/gas flammability: No data available

Other information

Substance Groups relevant properties No data available

Miscibility: No data available

Fat Solubility: No data available

Conductivity: No data available

10. Stability and reactivity

Reactivity

It may generate dangerous reactions (See subsections below)

Chemical stability

It may generate dangerous reactions (See subsections below)

Possibility of hazardous reactions

None.

Conditions to avoid

Avoid accumulating electrostatic charge.

Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

Hazardous decomposition products

None.

11. Toxicological information**Information on toxicological effects**

Likely routes of exposure:

Skin contact, skin absorption, eye contact, inhalation and ingestion.

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 irritation, Category 2(H315) |
| c) serious eye damage/irritation | The product is classified: Eye irritation, Category 2A(H319) |
| d) respiratory or skin sensitisation | The product is classified: Skin Sensitization, Category 1B(H317) |
| e) germ cell mutagenicity | Not classified Based on available data, the classification criteria are not met |
| f) carcinogenicity | The product is classified: Carcinogenicity, Category 2(H351) |
| g) reproductive toxicity | The product is classified: Reproductive toxicity, Category 2(H361) |
| h) STOT-single exposure | The product is classified: Specific target organ toxicity following single exposure, Category 3(H336) |
| i) STOT-repeated exposure | The product is classified: Specific target organ toxicity following repeated exposure, Category 2(H373) |
| j) aspiration hazard | Not classified Based on available data, the classification criteria are not met |

Toxicological information on main components of the mixture:

| | | |
|--|--------------------------|--|
| toluene; 1-Methylbenzene | a) acute toxicity | LD50 Oral Rat = 5580 mg/kg LD50 Skin Rabbit = 12124 mg/kg LC50 Inhalation Rat = 12.5 mg/l 4h |
| | g) reproductive toxicity | NOAEC Rat = 1200 ppm NOAEL Rat = 2000 ppm |
| tert-butyl acetate; Acetic acid, 1,1-dimethylethyl ester | a) acute toxicity | LD50 Skin Rabbit > 2000 mg/kg LC50 Inhalation Rat > 9482 mg/m ³ 4h LD50 Oral Rat = 4500 mg/kg |
| acetone; propan-2-one | a) acute toxicity | LD50 Oral Rat = 5800 mg/kg LD50 Skin Rabbit = 20000 mg/kg LC50 Inhalation Rat = 76 mg/l 4h LC50 Inhalation Rat = 50100 mg/m ³ 8h |
| n-hexane; hexyl hydride | a) acute toxicity | LD50 Skin Rabbit = 3000 mg/kg |
| 4-chloro-a,a,a-trifluorotoluene; chlorobenzotrifluoride | a) acute toxicity | LD50 Oral Rat 13000 mg/kg LC50 Inhalation Mouse 20 mg/l LD50 Skin Rabbit > 2 mg/kg LD50 Skin Rabbit > 2 ml/kg |

LC50 Inhalation Rat = 33 mg/l 4h

LD50 Oral Rat = 13 g/kg

LD50 Skin Rabbit > 2 ml/kg

LC50 Inhalation Rat = 33 mg/l 4h

LD50 Oral Rat = 13 g/kg

LD50 Skin Rabbit > 3300 mg/kg

g) reproductive toxicity No Observed Adverse Effect Level Oral Rat > 45

Substance(s) listed on the IARC Monographs:

toluene; 1-Methylbenzene Group 3

4-chloro-a,a,a-trifluorotoluene; chlorobenzotrifluoride Group 2B

Substance(s) listed as OSHA Carcinogen(s):

4-chloro-a,a,a-trifluorotoluene; chlorobenzotrifluoride

Substance(s) listed as NIOSH Carcinogen(s):

None

Substance(s) listed on the NTP report on Carcinogens:

None

12. Ecological information

Ecotoxicity

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

List of Eco-Toxicological properties of the product

The product is classified: Acute (short-term) aquatic hazard - Category 3(H402), Chronic (long-term) aquatic hazard - Category 3(H412)

List of Eco-Toxicological properties of the components

| Component | Ident. Numb. | Ecotox Data |
|---|---|--|
| toluene; 1-Methylbenzene | CAS: 108-88-3 - EINECS: 203- 625-9 - INDEX: 601-021-00-3 | a) Aquatic acute toxicity : EC50 Algae = 134 mg/L 3 a) Aquatic acute toxicity : LC50 Fish = 5.5 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 5.46 mg/L 48h EPA a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata > 433 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 12.5 mg/L 72h EPA b) Aquatic chronic toxicity : NOEC Daphnia = 0.74 mg/L - 7 days |
| tert-butyl acetate; Acetic acid, 1, 1-dimethylethyl ester | CAS: 540-88-5 - EINECS: 208- 760-7 - INDEX: 607-026-00-7 | a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 240 mg/L 96h ECHA |
| acetone; propan-2-one | CAS: 67-64-1 - EINECS: 200- 662-2 - INDEX: 606-001-00-8 | a) Aquatic acute toxicity : LC50 Daphnia 350 mg/L 48h ECHA a) Aquatic acute toxicity : EC50 Daphnia = 8800 mg/L 48h |
| n-hexane; hexyl hydride | CAS: 110-54-3 - EINECS: 203- 777-6 - INDEX: 601-037-00-0 | a) Aquatic acute toxicity : LC50 Fish = 5540 mg/L 96h a) Aquatic acute toxicity : EC50 Algae = 302 mg/L 96h a) Aquatic acute toxicity : EL50 Daphnia = 21.85 mg/L 96h a) Aquatic acute toxicity : LC50 Algae = 9.285 mg/L 72h a) Aquatic acute toxicity : LC50 Fish = 12.51 mg/L 96h |

4-chloro-a,a,a-trifluorotoluene;
chlorobenzotrifluoride

CAS: 98-56-6 -
EINECS: 202-
681-1

LC50 Fish Lepomis macrochirus = 11.4 mg/L 72h UNION CARBIDE CORP.
ENVIRONMENTAL SERVICES-THE ACUTE TOXICITY OF PCBTF TO BLUEGILL SUN
FISH UCES PROJECT NÂ° 11506-81-07-1979-N.Y.TARRY TOWN. - ca.11.4
ca.14.1 mg/L

LOEC Fish Pimephales promelas 1.4 mg/L ,,E G & G , BIONOMICS, AQUATIC
TOXICOLOGY LABORATORY-THE TOXICITY OF PCBTF TO FATHEAD MINNOW
EMBRIOS AND LARVAE - REPORT B W - 81-3-838, 1981, WAREHAM IN EPA
DOCUMENT NÂ° 40-8152019.

NOEC Fish Pimephales promelas 0.54 mg/L ,,E G & G , BIONOMICS, AQUATIC
TOXICOLOGY LABORATORY-THE TOXICITY OF PCBTF TO FATHEAD MINNOW
EMBRIOS AND LARVAE - REPORT B W - 81-3-838, 1981, WAREHAM IN EPA
DOCUMENT NÂ° 40-8152019.

EC50 Daphnia Daphnia magna = 0.12 mg/L 4d 1/6 2/6 PRESI DA UNION
CARBIDE CORP. ENVIRONMENTAL SERVICES-THE ACUTE TOXICITY OF PCBTF
TO THE WATER FLEA DAPHNIA MAGNA STRAUS UCES PROJECT NÂ° 11506-81-
06-1979- N.Y. TARRY TOWN IN EPA DOCUMENT NÂ° 40-7952015. 4/6 5/6
PRESI DA PECE P. - DETERMINAZI - ca.0.12 ca.0.222 mg/L

EC100 Daphnia Daphnia magna 4.92 mg/L 48h

EC50 Daphnia Daphnia magna = 10.7 mg/L 48h - ca.10.7 ca.14.5 mg/L

a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 3.68 mg/L 48h
IUCLID

a) Aquatic acute toxicity : LC50 Fish Danio rerio = 3 mg/L 96h ECHA

Persistence and degradability

| Component | Persitence/Degradability: |
|--|---------------------------|
| toluene; 1-Methylbenzene | Readily biodegradable |
| tert-butyl acetate; Acetic acid, 1, 1-dimethylethyl ester | Non-readily biodegradable |
| acetone; propan-2-one | Readily biodegradable |
| n-hexane; hexyl hydride | Readily biodegradable |

Bioaccumulative potential

| Component | Bioaccumulation |
|--|---------------------|
| tert-butyl acetate; Acetic acid, 1, 1-dimethylethyl ester | Not bioaccumulative |

Mobility in soil

N.A.

Other adverse effects

N.A.

13. Disposal considerations

Safe handling and methods for disposal

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

14. Transport information

UN number

TDG-UN number: UN1993
ADR-UN number: 1993
DOT-UN Number: UN1993
IATA-Un number: 1993
IMDG-Un number: 1993

UN proper shipping name

TDG-Shipping Name: FLAMMABLE LIQUID, N.O.S. (toluene - acetone)
ADR-Shipping Name: FLAMMABLE LIQUID, N.O.S. (toluene - acetone)
DOT-Proper Shipping Name: Flammable liquids, n.o.s. (toluene - acetone)
IATA-Technical name: FLAMMABLE LIQUID, N.O.S. (toluene - acetone)
IMDG-Technical name: FLAMMABLE LIQUID, N.O.S. (toluene - acetone)

Transport hazard class(es)

TDG-Class: 3
ADR-Class: 3
DOT-Hazard Class: 3
IATA-Class: 3
IMDG-Class: 3

Packing group

TDG-Packing Group: II
ADR-Packing Group: II
DOT Packing Group: II
IATA-Packing group: II
IMDG-Packing group: II

Environmental hazards

Marine pollutant: No
Environmental Pollutant: Not Applicable
DOT-RQ: Yes DOT-RQ - Quantity: 1000 lbs

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Not Applicable

Special precautions in connection with transport or conveyance

TDG:

TDG Special provisions: 16

Department of Transportation (DOT):

DOT-Special Provision(s): IB2, T7, TP1, TP8, TP28
DOT-Label(s): 3
DOT-Symbol: N/A
DOT-Cargo Aircraft: 60 L
DOT-Passenger Aircraft: 5 L
DOT-Bulk: 242
DOT-Non-Bulk: 202
DOT-Limited Quantity threshold: 1 L

Road and Rail (ADR-RID) :

ADR-Label: 3
ADR-Hazard identification number: 33
ADR-Transport category (Tunnel restriction code): 2 (D/E)

Air (IATA) :

IATA-Passenger Aircraft: 353
IATA-Cargo Aircraft: 364
IATA-Label: 3
IATA-Subsidiary hazards: -
IATA-Erg: 3H
IATA-Special Provisioning: A3

Sea (IMDG) :

IMDG-Stowage Code: Category B
IMDG-Stowage Note: -
IMDG-Subsidiary hazards: -

15. Regulatory information

Canada - Federal regulations

DSL - Domestic Substances List

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

This product complies with NDSL inventory

NPRI - National Pollutant Release Inventory

NPRI (National Pollutant Release Inventory) - List of substances listed.

No substances listed

USA - Federal regulations

TSCA - Toxic Substances Control Act

All the components are listed on the TSCA inventory

TSCA listed substances:

| | | |
|---|-------------------|--|
| toluene; 1-Methylbenzene | is listed in TSCA | Section 8b |
| tert-butyl acetate; Acetic acid, 1, 1-dimethylethyl ester | is listed in TSCA | Section 8b Section 8a - PAIR |
| acetone; propan-2-one | is listed in TSCA | Section 8b |
| n-hexane; hexyl hydride | is listed in TSCA | Section 8b |
| 4-chloro-a,a,a-trifluorotoluene; chlorobenzotrifluoride | is listed in TSCA | Section 8b Section 8a - PAIR Section 12b |

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

No substances listed

Section 304 - Hazardous substances:

toluene; 1-Methylbenzene
tert-butyl acetate; Acetic acid, 1,1-dimethylethyl ester
acetone; propan-2-one
n-hexane; hexyl hydride

Section 313 - Toxic chemical list:

toluene; 1-Methylbenzene
n-hexane; hexyl hydride

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

| | | | |
|--|----------------------|------|--------|
| toluene; 1-Methylbenzene | Reportable quantity: | 1000 | pounds |
| tert-butyl acetate; Acetic acid, 1,1-dimethylethyl ester | Reportable quantity: | 5000 | pounds |
| acetone; propan-2-one | Reportable quantity: | 5000 | pounds |
| n-hexane; hexyl hydride | Reportable quantity: | 5000 | pounds |

CAA - Clean Air Act

CAA listed substances:

| | | | |
|--------------------------|------------------|----------------------|----------------------|
| toluene; 1-Methylbenzene | is listed in CAA | Section 112(b) - HAP | Section 112(b) - HON |
| acetone; propan-2-one | is listed in CAA | Section 112(b) - HON | |
| n-hexane; hexyl hydride | is listed in CAA | Section 112(b) - HAP | Section 112(b) - HON |

CWA - Clean Water Act

CWA listed substances:

| | | | |
|---|------------------|-------------|-------------|
| toluene; 1-Methylbenzene | is listed in CWA | Section 307 | Section 311 |
| tert-butyl acetate; Acetic acid, 1, 1-dimethylethyl ester | is listed in CWA | Section 311 | |

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

| | |
|--------------------------|---------------------------------|
| toluene; 1-Methylbenzene | Listed as reproductive toxicant |
|--------------------------|---------------------------------|

| | |
|--|---------------------------------|
| n-hexane; hexyl hydride | Listed as reproductive toxicant |
| 4-chloro-a,a,a-trifluorotoluene; chlorobenzotrifluoride | Listed as carcinogen |

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

toluene; 1-Methylbenzene
tert-butyl acetate; Acetic acid, 1,1-dimethylethyl ester
acetone; propan-2-one
n-hexane; hexyl hydride

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

toluene; 1-Methylbenzene
tert-butyl acetate; Acetic acid, 1,1-dimethylethyl ester
acetone; propan-2-one
n-hexane; hexyl hydride

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

toluene; 1-Methylbenzene
tert-butyl acetate; Acetic acid, 1,1-dimethylethyl ester
acetone; propan-2-one
n-hexane; hexyl hydride
4-chloro-a,a,a-trifluorotoluene; chlorobenzotrifluoride

16. Other information

Safety Data Sheet dated: 8/22/2024 - version 5

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

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

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

This SDS cancels and replaces any preceding release.

| Code | Description |
|-------|---|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H361f | Suspected of damaging fertility. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure if inhaled. |
| H401 | Toxic to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

| Code | Hazard class and hazard category | Description |
|-------------|----------------------------------|---|
| A.1/4/Inhal | Acute Tox. 4 | Acute toxicity (inhalation), Category 4 |
| A.10/1 | Asp. Tox. 1 | Aspiration hazard, Category 1 |
| A.2/2 | Skin Irrit. 2 | Skin irritation, Category 2 |

| | | |
|------------|-------------------|--|
| A.3/2A | Eye Irrit. 2A | Eye irritation, Category 2A |
| A.4.2/1B | Skin Sens. 1B | Skin Sensitization, Category 1B |
| A.6/2 | Carc. 2 | Carcinogenicity, Category 2 |
| A.7/2 | Repr. 2 | Reproductive toxicity, Category 2 |
| A.8/3 | STOT SE 3 | Specific target organ toxicity following single exposure, Category 3 |
| A.9/2 | STOT RE 2 | Specific target organ toxicity following repeated exposure, Category 2 |
| B.6/2 | Flam. Liq. 2 | Flammable Liquids — Category 2 |
| B.6/3 | Flam. Liq. 3 | Flammable Liquids — Category 3 |
| CAN-HAE/A2 | Aquatic Acute 2 | Acute (short-term) aquatic hazard - Category 2 |
| CAN-HAE/C2 | Aquatic Chronic 2 | Chronic (long-term) aquatic hazard - Category 2 |
| CAN-HAE/C3 | Aquatic Chronic 3 | Chronic (long-term) aquatic hazard - Category 3 |

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

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
IMDG: International Maritime Code for Dangerous Goods.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 5. FIRE-FIGHTING MEASURES
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION