

Turpentine

SECTION 1. IDENTIFICATION

Product Identifier Turpentine

Other Means of

13-300, 13-301, 13-304, 23-309, 33-300, 33-301, 83-301, 83-304, 53-300, 53-301, 53-304

Identification

Recommended Use Please refer to Product label.

Restrictions on Use None known.

Manufacturer/Supplier Recochem Inc., 850 Montee de Liesse, Montreal, QC, H4T 1P4, Compliance and Regulatory

Identifier Department, 905-878-5544, www.recochem.com

Emergency Phone No. CANUTEC, 613-996-6666, 24 Hours

SDS No. 1599

SECTION 2. HAZARD IDENTIFICATION

Classification

Flammable liquid - Category 3; Acute toxicity (Oral) - Category 4; Acute toxicity (Dermal) - Category 4; Acute toxicity (Inhalation) - Category 4; Skin irritation - Category 2; Eye irritation - Category 2A; Skin sensitization - Category 1; Aspiration hazard - Category 1; Aquatic hazard (Acute) - Category 2; Aquatic hazard (Chronic) - Category 2

Label Elements









Signal Word: Danger

Hazard Statement(s):

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Prevention:

P210 Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical, ventilating, lighting, and other equipment.

Product Identifier: Turpentine - Ver. 1 SDS No.: 1599

Date of Preparation: November 02, 2015

Date of Last Revision: September 11, 2019 Page 01 of 08

| P242 | Use only non-sparking tools. |
|------|--|
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing fume, mist, vapours, spray. |
| P264 | Wash hands and skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing must not be allowed out of the workplace. |
| P280 | Wear protective gloves/eye protection/face protection. |

Response:

P273

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor.

P331 Do NOT induce vomiting.

P330 Rinse mouth.

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

P312 Call a POISON CENTRE or doctor if you feel unwell.

Avoid release to the environment.

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

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

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

P312 Call a POISON CENTRE or doctor if you feel unwell.

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 or doctor if you feel unwell.

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

P370 + P378 In case of fire: Use appropriate foam, carbon dioxide, dry chemical powder, water spray or fog to extinguish.

P391 Collect spillage.

Storage:

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

| Chemical Name | CAS No. | % | Other Identifiers | Other Names |
|---------------|-----------|-----|-------------------|-------------|
| Turpentine | 8006-64-2 | 100 | | |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor. Call a Poison Centre or doctor if you feel unwell.

Skin Contact

| Product Identifier: Turper | tine - Ver. 1 | 3 No.: | 1599 |
|----------------------------|---------------|--------|------|
| | | | |
| | | | |
| | | | |

Date of Preparation: November 02, 2015

Date of Last Revision: September 11, 2019 Page 02 of 08

Avoid direct contact. Wear chemical protective clothing if necessary. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation or a rash occurs, get medical advice or attention. Call a Poison Centre or doctor if you feel unwell. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Eye Contact

Avoid direct contact. Wear chemical protective gloves if necessary. Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention.

Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, nervous system, skin.

Special Instructions

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Medical Conditions Aggravated by Exposure

Dermatitis, skin allergies.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air. Can be ignited by static discharge. Can accumulate static charge by flow, splashing or agitation. Liquid can float on water and may travel to distant locations and/or spread fire. May travel a considerable distance to a source of ignition and flash back to a leak or open container. See Section 9 (Physical and Chemical Properties) for flash point and explosive limits. May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, resulting in a fire hazard. May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, resulting in a health hazard. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Product Identifier: Turpentine - Ver. 1 SDS No.: 1599

Date of Preparation: November 02, 2015

Date of Last Revision: September 11, 2019 Page 03 of 08

Personal Precautions, Protective Equipment, and Emergency Procedures

No special precautions are necessary.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| | ACGII | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|---------------|-----------|--------------------|---------|-----------------|----------|-----------|--|
| Chemical Name | TWA | STEL | TWA | Ceiling | 8-hr TWA | TWA | |
| Turpentine | 20 ppm A4 | Not established | 100 ppm | Not established | | | |

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Control static electricity discharges which includes bonding of equipment to ground. Use only non-combustible, compatible materials for walls, floors, ventilation system, air cleaning devices, pallets, shelving. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Product Identifier: Turpentine - Ver. 1 SDS No.: 1599

Date of Preparation: November 02, 2015

Date of Last Revision: September 11, 2019 Page 04 of 08

Not usually required when working with small quantities. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance Colourless liquid.

Odour Pine

Odour Threshold 100.9 - 201.8 ppm (560 - 1120 mg/m3)

pH Not applicable

Melting Point/Freezing Point -50 - -60 °C (-58 - -76 °F) (melting); -50 - -60 °C (-58 - -76 °F) (freezing)

Initial Boiling Point/Range 150 - 180 °C (302 - 356 °F)

Flash Point 36 °C (97 °F) (closed cup)

Evaporation Rate < 0.005 (n-butyl acetate = 1)

Flammability (solid, gas) Not applicable

Upper/Lower Flammability or

Explosive Limit

Not available (upper); 0.8% (lower)

Vapour Pressure 5 mm Hg (1 kPa) at 25 °C

Vapour Density (air = 1) 4.7

Relative Density (water = 1) 0.860 - 0.875 at 20 °C

Solubility Insoluble in water; Soluble in all proportions in common organic solvents.

Partition Coefficient, Not applicable

n-Octanol/Water (Log Kow)

Auto-ignition Temperature 253 °C (487 °F) **Decomposition Temperature** Not available

Viscosity Not available (kinematic); Not available (dynamic)

Other Information

Physical State Liquid Molecular Weight 136

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Exposure to air. Sunlight. Light. Temperatures above 36.0 °C (96.8 °F)

Incompatible Materials

Forms flammable chemicals on contact with: halogens (e.g. chlorine). Reacts explosively with: strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Product Identifier: Turpentine - Ver. 1 SDS No.: 1599

Date of Preparation: November 02, 2015

Date of Last Revision: September 11, 2019 Page 05 of 08

Likely Routes of Exposure

Skin contact; inhalation; eye contact.

Acute Toxicity

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|---------------|----------------------------------|------------------|---------------|
| Turpentine | 2115 ppm (rat) (4-hour exposure) | 5760 mg/kg (rat) | Not available |

LC50: Not applicable.

LD50 (oral): Not applicable. LD50 (dermal): Not applicable.

Skin Corrosion/Irritation

Human experience and animal tests show mild irritation.

Serious Eye Damage/Irritation

Human experience and animal tests show serious eye irritation. The vapour also irritates the eyes.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Causes damage to organs based on human experience. Depression of the central nervous system. Symptoms may include headache, nausea, dizziness, drowsiness and confusion. A severe exposure can cause unconsciousness. May be harmful based on human experience. At high concentrations nose and throat irritation.

Skin Absorption

May be harmful based on limited evidence.

Ingestion

May be harmful based on human experience and animal tests. Depression of the central nervous system. Symptoms may include headache, nausea, dizziness, drowsiness and confusion. A severe exposure can cause

Symptoms may include headache, nausea, dizziness, drowsiness and confusion. A severe exposure can cause unconsciousness.

May be harmful based on human experience. Can cause effects as described for inhalation.

Aspiration Hazard

Can cause lung damage if aspirated based on human experience. Death can result.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause Following skin contact: dermatitis. Symptoms may include dry, red, cracked skin (dermatitis). effects similar to STOT (Specific Target Organ Toxicity) - Single Exposure, as described above.

May cause damage to organs based on limited evidence. Harmful effects on the kidneys.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer.

Skin sensitizer.

Carcinogenicity

| Chemical Name | IARC | ACGIH® | NTP | OSHA |
|---------------|------------|--------|------------|------------|
| Turpentine | Not Listed | A4 | Not Listed | Not Listed |

Key to Abbreviations

A4 = Not classifiable as a human carcinogen.

Reproductive Toxicity

Development of Offspring

Animal studies show effects on the offspring. However, these effects are only seen with significant toxicity in the mothers. If inhaled: known to cause: decreased weight.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Product Identifier: Turpentine - Ver. 1 SDS No.: 1599

Date of Preparation: November 02, 2015

Date of Last Revision: September 11, 2019 Page 06 of 08

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute Aquatic Toxicity

| Chemical Name | LC50 Fish | EC50 Crustacea | ErC50 Aquatic Plants | ErC50 Algae |
|---------------|----------------------------------|--|----------------------|-------------|
| Turpentine | 29 mg/L (Zebra Fish; 96-hour) | 6.4 mg/L (Daphnia magna (water flea); 48-hour) | | |

Chronic Aquatic Toxicity

| Chemical Name | NOEC Fish | EC50 Fish | NOEC Crustacea | EC50 Crustacea |
|---------------|---------------|-----------|----------------|----------------|
| Turpentine | Not available | | Not available | |

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

| Regulation | UN No. | Proper Shipping Name | Transport Hazard Class(es) | Packing Group |
|--------------|--------|----------------------|-------------------------------|------------------|
| Canadian TDG | 1299 | TURPENTINE | 3 | III |
| US DOT | 1299 | TURPENTINE | 3 | Ш |

Environmental Hazards

Marine Pollutant (Turpentine)

Special Precautions

Please note: In containers of 5 L (5Kg) capacity or less this product is classified as a "Limited

Quantities""Consumer Commodity" under TDG regulations.

In containers of 5 L (5Kg) capacity or less this product is classified as a "Consumer

Commodity" under DOT regulations.

Product Identifier: Turpentine - Ver. 1 SDS No.: 1599

Date of Preparation: November 02, 2015

Date of Last Revision: September 11, 2019 Page 07 of 08

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By Compliance and Regulatory Department

Phone No. 905-878-5544 **Date of Preparation** November 02, 2015 Date of Last Revision September 11, 2019

Revision Indicators The following SDS content was changed on February 12, 2019:

> SECTION 1. IDENTIFICATION; Other Means of Identification. The following SDS content was changed on September 11, 2019: SECTION 1. IDENTIFICATION; Other Means of Identification.

Additional Information We are committed to uphold the Industry Consumer Ingredient Communication Voluntary

Initiative.

Please send us your request by visiting our website at www.recochem.com.

Ingredients present (intentionally added ingredients) at a concentration of greater than one percent (1%) shall be listed in descending order of predominance. Ingredients present at a concentration of not more than one percent shall be listed but may be disclosed without

respect to order of predominance.

Disclaimer Notice to reader: To the best of our knowledge, the information contained herein is accurate.

> However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are

described herein, we cannot guarantee that these are the only hazards that exist.

SDS No.: 1599

Date of Preparation: November 02, 2015

Date of Last Revision: Page September 11, 2019 08 of 80



Product Identifier:

Turpentine - Ver. 1