



Safety Data Sheet

Product Identifier: Turpentine

SDS ID: 3100-027

Section 1 - IDENTIFICATION

Product Identifier

Product Name: Turpentine

Synonyms

Spirit or Oil of Turpentine; Sulfate of Turpentine; Flammable Pulp Mill Liquid

Recommended Use

Raw turpentine is separated from condensed digester relief gases in the Kraft pulping process. The turpentine can be distilled and used in numerous products including camphor, synthetic resins, solvents, and insecticides.

Restrictions on Use

None known.

SDS ID: 3100-027

Manufacturer Information

Pixelle Specialty Solutions LLC
232 East 8th Street
Chillicothe, Ohio 45601

Phone: 740-772-3111

Emergency # : 800-424-9300 CHEMTREC®

General Comments

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

Section 2 - HAZARD(S) IDENTIFICATION

Classification in accordance with 29 CFR 1910.1200.

Flammable liquid, Category 3
Acute Toxicity (Inhalation), Category 4
Skin Corrosion / Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 1
Skin sensitizer, Category 1
Aspiration toxicity, Category 1
Specific Target Organ Toxicity - Single Exposure, Category 1 (kidneys)
Specific Target Organ Toxicity - Single Exposure, Category 3 (respiratory tract)
Specific Target Organ Toxicity - Repeated Exposure, Category 1 (kidneys and respiratory system)
Hazardous to the aquatic environment - chronic hazard, Category 2

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER

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Hazard Statement(s)

Flammable liquid and vapor
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May be fatal if swallowed and enters airways
Causes damage to kidneys.
May cause respiratory irritation
Causes damage to kidneys and respiratory system through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects

Precautionary Statement(s)

Prevention

Keep away from heat, sparks, open flame, and hot surfaces - 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. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Do not eat, drink, or smoke when using this product. Wear protective gloves/clothing and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling. Avoid release to the environment.

Response

In case of fire: Use appropriate media for extinction. IF exposed: Call a POISON CENTER or doctor/physician. Specific treatment may be needed, see first aid section of Safety Data Sheet. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Collect spillage.

Storage

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

Disposal

Dispose in accordance with all applicable regulations.

* * *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

CAS	Component	Percent
8006-64-2	Turpentine	100

* * *Section 4 - FIRST-AID MEASURES* * *

Description of Necessary Measures

Inhalation

Remove exposed subject to fresh air. If not breathing, perform artificial respiration. If breathing is difficult, administer oxygen (by trained personnel only). Get medical attention

Skin Contact

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

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Ingestion

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. If the victim is unconscious, keep airway open and lay the victim on his or her side with the head lower than the body

Most Important Symptoms/Effects

Acute

Causes skin irritation, eye burns, allergic skin reaction, lung damage (from aspiration), kidney damage, and respiratory tract irritation.

Delayed

Causes allergic skin reaction, kidney damage, and respiratory system damage.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively.

Section 5 - FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Media to use includes carbon dioxide, regular dry chemical, regular foam, and water spray.

Unsuitable Extinguishing Media

Do not use high-pressure water streams. Use of water may spread fire.

Special Hazards Arising from the Chemical

Flammable liquid and vapor. Do not cut, puncture, or weld on or near this container. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back.

Hazardous Combustion Products

Combustion: Hazardous decomposition products include black smoke and toxic fumes of carbon dioxide and carbon monoxide, oxides of sulfur, oxides of nitrogen

Special Protective Equipment and Precautions for Firefighters

Wear personal protective clothing and equipment such as self-contained breathing apparatus (SCBA) for protection against possible exposure.

Fire Fighting Measures

Keep unnecessary people away, isolate hazard area and deny entry. Move undamaged containers from fire area. Cool containers with water spray until well after the fire is out. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Dike for later disposal. Do not scatter spilled material with high-pressure water streams. Keep out of water supplies and sewers.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment. Follow facility-specific procedures for spill response. Eliminate all sources of ignition. Ventilate closed spaces before entering. Keep unnecessary people away, isolate hazard area and deny entry.

Methods and Materials for Containment and Cleaning Up

Stop leak if possible without personal risk. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. **Large spills:** Dike for later disposal.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Keep container tightly closed. Ground any equipment used in handling. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools and equipment. Take precautionary measures against static discharge. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Avoid contact with eyes, skin and clothing. Do not eat, drink, or smoke when using this product. Wear protective gloves/clothing and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling. Avoid release to the environment.

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Conditions for Safe Storage, including any Incompatibilities

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep cool. Keep container tightly closed. Avoid direct sunlight. Store locked up. Keep separated from incompatible substances.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Neither the Occupational Safety and Health Administration (OSHA) nor the American Conference of Governmental Hygienists (ACGIH) have developed exposure limits for this product. Exposure limits exist for the following ingredients.

Component Exposure Limits

Turpentine (8006-64-2)

ACGIH: 20 ppm TWA

OSHA: 100 ppm TWA; 560 mg/m³ TWA

NIOSH: 100 ppm TWA; 560 mg/m³ TWA

Mexico 100 ppm TWA LMPE-PPT; 560 mg/m³ TWA LMPE-PPT

Appropriate Engineering Controls

If operations generate vapor or mist, use adequate general or local ventilation to keep airborne concentrations below exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eyes/Face Protection

Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

Wear appropriate chemical resistant clothing. Depending on the operation, a labcoat, apron or other impermeable clothing may be appropriate

Glove Recommendations

Wear appropriate chemical resistant gloves. Customer is responsible for determining suitability of gloves for the work environment and other solvents or chemicals to which the employee may normally be exposed. Replace gloves at first signs of deterioration (hardening, cracking, softening or swelling). Recommended materials include: polyvinyl alcohol (PVA) and nitrile.

Respiratory Protection

Respiratory protection not normally required. If airborne contaminant levels may exceed recommended exposure limits, NIOSH approved respiratory protection appropriate for employee exposure levels is recommended. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: colorless

Odor: pungent odor

pH: Not available

Boiling Point: Not available

Flash Point: 31.7°C (89°F)

LEL: 0.8%

Vapor Pressure: 4 mmHg (20°C)

Bulk Density: Not available

Specific Gravity (water = 1): 0.87 (25 °C)

Log KOW: Not available

Viscosity: Not available

Appearance: colorless liquid

Physical Form: liquid

Odor Threshold: Not available

Melting Point: Not available

Decomposition: Not available

Evaporation Rate: Not available

UEL: 6%

Vapor Density (air = 1): 4.8

Density: Not available

Water Solubility: Insoluble

Auto Ignition: Not available

Volatility: 100% @ 21.3°C

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Other Property Information

No additional information is available.

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Product is stable under normal conditions of use

Possibility of Hazardous Reactions

Hazardous polymerization has not been reported to occur under normal temperatures and pressures

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. When exposed to excess air and moisture, the oxidation process may generate temperatures high enough to cause combustion. Avoid contact with incompatible materials.

Incompatible Materials

Incompatible materials include oxidizing materials, CHROMIC ANHYDRIDE, chromium trioxide, calcium hypochlorite, chlorine, CHROMYL CHLORIDE, hexachloromelamine, TRICHLOROMELAMINE, and stannic chloride.

Hazardous Decomposition

Combustion: Hazardous decomposition products include black smoke and toxic fumes of carbon dioxide and carbon monoxide, oxides of sulfur, oxides of nitrogen

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Turpentine (8006-64-2)

Dermal LD50 Rabbit >5010 mg/kg; Inhalation LC50 Rat 12 g/m³ 6 h; Oral LD50 Rat 5760 mg/kg

Information on Likely Routes of Exposure

Inhalation

irritation, ringing in the ears, nausea, vomiting, diarrhea, stomach pain, chest pain, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, loss of coordination, convulsions, coma, brain damage, respiratory system damage, kidney damage

Ingestion

aspiration hazard, lung damage (from aspiration), irritation, difficulty breathing, headache, drowsiness, dizziness, loss of coordination, lung congestion, brain damage

Skin Contact

irritation, allergic reactions, itching, nausea, vomiting, diarrhea, stomach pain, chest pain, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, loss of coordination, convulsions, coma

Eye Contact

burns

Immediate Effects

Causes skin irritation, eye burns, allergic skin reaction, lung damage (from aspiration), kidney damage, and respiratory tract irritation.

Delayed Effects

Causes allergic skin reaction, kidney damage, and respiratory system damage.

Medical Conditions Aggravated by Exposure

kidney disorders, respiratory disorders, skin disorders and allergies

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Irritation/Corrosivity Data

Causes skin irritation, eye burns, and respiratory tract irritation.

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Germ Cell Mutagenicity

No data available for this product.

Carcinogenicity

Component Carcinogenicity

Turpentine (8006-64-2)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

DFG: Category 3A (could be carcinogenic for man)

Reproductive Toxicity

No data available for this product.

Specific Target Organ Toxicity - Single Exposure

kidneys, respiratory system

Specific Target Organ Toxicity - Repeated Exposure

kidneys, respiratory system

Aspiration Hazard

Aspiration hazard.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Analysis - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

Persistence and Degradability

No information available for the product.

Bioaccumulation

No information available for the product.

Mobility

No information available for the product.

Other Toxicity

No additional information is available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

Disposal of Contaminated Packaging

Dispose in accordance with all applicable regulations.

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Section 14 - TRANSPORT INFORMATION

US DOT Information

Shipping Name: Turpentine

UN/NA #: UN1299 Hazard Class: 3 Packing Group: III

Required Label(s): 3

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TDG Information

Shipping Name: Turpentine

UN #: UN1299 Hazard Class: 3 Packing Group: III

Required Label(s): 3

IMDG Information

Shipping Name: Turpentine

UN #: UN1299 Hazard Class: 3 Packing Group: III

Required Label(s): 3

IATA Information

Shipping Name: Turpentine

UN #: UN1299 Hazard Class: 3 Packing Group: III

Required Label(s): 3

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

None of this products components are listed under SARA Section 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312

Acute Health: Yes

Chronic Health: Yes

Fire: Yes

Pressure: No

Reactive: No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	MA	MN	NJ	PA
Turpentine	8006-64-2	Yes	Yes	Yes	Yes	No

No information is available.

Chemical Inventory Listings

Component Analysis - Inventory

Component	CAS #	US
Turpentine	8006-64-2	Yes

Section 16 - OTHER INFORMATION

Summary of Changes

Updated: 11/01/2018

NFPA Ratings:

Health: 3

Fire: 3

Reactivity: 0

HMIS Ratings:

Health: 3*

Fire: 3

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Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

Hazard Ratings

The hazard ratings included in this MSDS have been developed based on NFPA and HMIS criteria as well as professional judgment. A hazard rating has not been developed by NFPA for this product. This information is intended solely for the use of individuals trained in these hazard rating systems.

Key / Legend

TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NTP = National Toxicology Program; IATA = International Air Transport Association; RID = European Rail Transport; ADR = European Road Transport; IMO = International Maritime Organization; DFG = Deutsche Forschungsgemeinschaft; MAK = Maximum Concentration Value in the Workplace; MEL = Maximum Exposure Limits; TWA = Time Weighted Average; STEL = Short-term Exposure Limit

Preparation and Revision Information

Prepared by Pixelle Specialty Solutions LLC, Product Stewardship Department, 232 East 8th Street, Chillicothe, OH 45601.

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End of Sheet 3100-027