

1 - 11

Safety Data Sheet

PRODUCT : Grumbacher Turpentine

01563-1005

In Compliance with OSHA Hazard Communication Standard 29 CFR 1910.1200

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name:	Grumbacher Turpentine, 568
Chemical Name:	TURPENTINE
CAS Number:	9005-90-7 & 8006-64-2
EINECS Number:	232-350-7
Relevant Identified Uses:	Solvent
Synonyms:	OIL OF TURPENTINE, SPIRITS OF TURPENTINE
Uses advised against:	None known
Company name:	Chartpak, Inc.
Address:	One River Road Leeds, MA 01053
Phone Number:	(800) 628-1910
CHEMTREC 24-Hour Emergency Phone Number:	Toll-Free (800) 494-9300; Collect (202) 483-7616
E-mail and Website:	info@chartpak.com , www.chartpak.com

2. HAZARDS IDENTIFICATION

SIGNAL WORD: DANGER



GHS02

GHS07

GHS08

GHS09

Classification of the
substance or mixture:

FLAMMABLE LIQUID, CATEGORY 3
ACUTE ORAL TOXICITY, CATEGORY 4
ASPIRATION HAZARD, CATEGORY 1
ACUTE DERMAL TOXICITY, CATEGORY 4
SKIN IRRITANT, CATEGORY 2

1

2 - 11

Safety Data Sheet

SKIN SENSITIZER, CATEGORY 1
EYE IRRITANT, CATEGORY 2A
ACUTE INHALATION TOXICITY, CATEGORY 4
HAZARDOUS TO THE AQUATIC ENVIRONMENT, LONG-TERM (CHRONIC), CATEGORY 2

HAZARD STATEMENTS

PHYSICAL HAZARDS: H226 - Flammable liquid and vapor

HEALTH HAZARDS: H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled

ENVIRONMENTAL HAZARDS: H411 - Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS

PREVENTION: P210 - Keep away from heat / sparks / open flames / hot surfaces.
No smoking
P233 - Keep container tightly closed
P260 - Do not breathe dust / fume / gas / mist / vapors / spray
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
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

RESPONSE: P301 + P310 - If swallowed: immediately call a poison center or doctor / physician
P302 + P352 - If on skin: wash with plenty of soap and water
P330 - RINSE MOUTH
P331 - DO NOT INDUCE VOMITING
P333 + P313 - If skin irritation or rash occurs: get medical advice / attention
P362 - Take off contaminated clothing and wash before reuse

STORAGE: P403 + P233 + P235 - Store in a well-ventilated place. Keep container tightly closed. Keep cool.

DISPOSAL: P501 - Dispose of contents / container to approved disposal facility or site

Refer to Section 15 for other regulations.

3 - 11

Safety Data Sheet

3. COMPOSITION AND INFORMATION ON INGREDIENTS

This product is a mixture of bicyclic mono-terpenic hydrocarbons, mostly alpha & beta-pinene.

EC/UPAC NAME	CAS	EINECS	WEIGHT %	SYMBOL	R PHASES	S PHASES
Alpha Pinene	80-56-8	201-291-9	70-80%	Xn	R10, R38, R43, R65	S24, S37, S62
Beta Pinene	127-91-3	204-872-5	7-10%	Xn	R10, R38, R43, R65	S24, S37, S62
Other Terpenes	N/A	N/A	20-25%	Xn, N	R10, R11, R20/21/22, R36/37/38, R50/51/53, R65	S02, S16, S20/21, S23, S24/25, S26, S29, S36/37, S46, S57, S61, S62

4. FIRST AID MEASURES

AFTER INHALATION:

Supply fresh air. If symptoms are experienced, get medical attention. In case of unconsciousness, place patient stably in side position for transportation.

AFTER INGESTION:

DO NOT INDUCE VOMITING. Immediately call a doctor / physician. In conscious persons, drink plenty of water to dilute ingested material. In case of involuntary vomiting, allow for clear drainage to avoid suffocation.

AFTER SKIN CONTACT:

Remove contaminated clothing and immediately wash with plenty of soap and water. Get medical attention if irritation or skin rash occurs. Wash contaminated clothing before use. Clean contaminated footwear thoroughly before use.

AFTER EYE CONTACT:

Immediately rinse with plenty of water. Remove contact

4 - 11

Safety Data Sheet

lenses if present and easy to do. Hold eyelids apart and flush eyes with plenty of cool low-pressure water for at least 15 minutes. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT:	FLAMMABLE LIQUID
FLASH POINT:	37-40°C (@ 1 atmosphere, open cup method)
EXTINGUISHING MEDIA:	
• SUITABLE:	DRY CHEMICALS, CARBON DIOXIDE (CO₂), FOAM, POWDER, SAND, DOLOMITE
• UNSUITABLE:	WATER WITH JET
HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:	CARBON DIOXIDE, CARBON MONOXIDE, ACRID FUMES, AND UNIDENTIFIED ORGANIC COMPOUNDS
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus. Storage containers exposed to fire should be kept cool.

6. ACCIDENTAL RELEASE MEASURES

PERSON-RELATED SAFETY PRECAUTIONS:	Wear personal protective equipment. Evacuate unprotected persons to safe areas. Provide adequate ventilation. Remove all sources of ignition.
MEASURES FOR ENVIRONMENTAL PROTECTION:	Do not allow product to reach soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (soil, waterways, drains or sewers).
MEASURES FOR CLEANING / COLLECTING:	
• SMALL SPILL:	Absorb spilled liquid with inert absorbent (e. g. vermiculite, sand or similar). Collect and seal in an appropriate container properly labeled for disposal.

5 - 11

Safety Data Sheet

• **LARGE SPILL:**

Stop spill if it can be done without danger. Dike. Pump as much liquid as possible with an explosion-proof pump or a hand pump. Absorb the remaining liquid with inert absorbent. Collect and seal in an appropriate container properly labeled for disposal. Use only non-sparking tools.

• **RECOVERY:**

Liquid material may be recovered by decanting in a water tank.

7. HANDLING AND STORAGE

HANDLING:

Wear personal protective equipment. Provide adequate ventilation. Take precautionary measures against static discharge. Use only non-sparking tools. Keep away from heat, sparks, open flames and hot surfaces.

STORAGE:

Requirements for storage areas and containers: Store in a cool well-ventilated place. Keep container tightly closed. All equipment including ventilation systems must be equipotential and earthed. Keep away from sources of ignition. Protect from heat and direct sunlight.

RECOMMENDED AND UNSUITABLE MATERIALS FOR STORAGE:

• **SUITABLE:**

Stainless steel, aluminum

• **UNSUITABLE:**

Certain plastics and elastomers may not be compatible with the product. Test or get manufacturers recommendation prior to use.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS:

Long term (8 hours): 100ppm
Short term (15 minutes): 150ppm

BIOLOGICAL EXPOSURE LIMITS:

NOT AVAILABLE

DNEL:

NOT AVAILABLE

6 - 11

Safety Data Sheet

PNEC:	NOT AVAILABLE
ENGINEERING MEASURES:	Provide local exhaust or general room ventilation to minimize exposure to vapors. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
PERSONAL PROTECTION:	
EYES / FACE PROTECTION:	Safety goggles (standard EN 166).
HAND PROTECTION:	Protective gloves resistant to chemicals (standard EN 374-1). Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
BODY PROTECTION:	Protective work clothing
RESPIRATORY PROTECTION:	Use suitable respiratory protective device in case of insufficient ventilation.
GENERAL PROTECTIVE AND HYGIENIC MEASURES:	The usual precautionary measures are to be adhered to when handling chemicals. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Colorless liquid at 20°C
ODOR:	Pine characteristic
pH:	Not applicable
ACID NUMBER:	Not applicable
MELTING / FREEZING POINT:	Not applicable
BOILING RANGE (760 mmHg):	157.2 - 176.7°C (315 - 350°F)
FLASH POINT:	35°C (95°F)
EVAPORATION RATE:	< 1 (butyl acetate = 1)
FLAMMABILITY:	Flammable
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	Not available
VAPOR PRESSURE:	4 mmHg
VAPOR DENSITY:	> 1 (air = 1)

7 - 11

Safety Data Sheet

SPECIFIC GRAVITY:	0.850 - 0.855 at 15.5°C
WATER SOLUBILITY:	< 1%
REFRACTION INDEX:	1.4655 - 1.4725 at 20°C
PARTITION COEFFICIENT N-OCTANOL / WATER (LOG VALUE):	Not available
SELF-IGNITION TEMPERATURE:	253°C (487.4°F)
DECOMPOSITION TEMPERATURE:	Not available
VISCOSITY:	Not available
EXPLOSIVE PROPERTIES:	Not available
OXIDIZING PROPERTIES:	Not available
DISSOCIATION CONSTANT:	Not available
STABILITY IN ORGANIC SOLVENTS AND IDENTITY OF RELEVANT DEGRADATION PRODUCTS:	Not available

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	No decomposition if used according to specifications
REACTIVITY:	Non-reactive when in contact with air or water.
CONDITIONS TO AVOID:	Prolonged or excessive heat and/or exposure to air may cause non-hazardous decomposition and/or oxidation of the substance. Keep away from heat and sources of ignition.
MATERIALS TO AVOID:	Avoid contact with strong acids, strong bases, and strong oxidizing agents.
HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:	Thermal decomposition may generate carbon monoxide, carbon dioxide and other unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION

Acute Inhalation Toxicity: May cause transient irritation to the respiratory system. Exposure to high vapor concentration may cause effects similar to those of ingestion.

Acute Dermal Toxicity: May be absorbed through the skin. May cause sensitization by skin contact. Repeated / prolonged contact may cause mild irritation and drying (defatting) of skin.

Ingestion: May cause nausea, vomiting, dizziness and depression of central nervous system.

8 - 11

Safety Data Sheet

HUMAN HEALTH HAZARD ASSESSMENT

Acute Toxicity - LD₅₀ (mg/kg)

COMPONENT	CAS	ORAL, RAT	DERMAL, RABBIT	INHALATION - LC ₆₀
Alpha Pinene	80-56-8	3700	2000	Not Determined
Beta Pinene	127-91-3	3700	2000	Not Determined
Other Terpenes	N/A	> 5000	> 3000	Not Determined

OTHER DATA

COMPONENT	CAS	MUTAGENICITY	CARCINOGENICITY	REPRODUCTIVE TOXICITY: DEVELOPMENTAL TOXICITY - ORAL
Alpha Pinene	80-56-8	Negative	Not Determined	NOAEL: 250mg/kg bw/day
Beta Pinene	127-91-3	Negative	Not Available	NOAEL: 250mg/kg bw/day
Other Terpenes	N/A	Negative	Not Available	Not Available

12. ECOLOGICAL INFORMATION

Marine Pollutant. Toxic to aquatic organisms.

Prevent contamination of soil, drains or surface water; use appropriate containment methods to avoid runoff into storm sewers, ditches that lead to waterways.

9 - 11

Safety Data Sheet

ECOTOXICITY:**ACUTE TOXICITY: FISH****NOT AVAILABLE****ACUTE TOXICITY: DAPHNIA****NOT AVAILABLE****ACUTE TOXICITY: ALGAE****NOT AVAILABLE****BIODEGRADABILITY:****NOT AVAILABLE****BIOACCUMULATIVE POTENTIAL:****NOT AVAILABLE**

13. CONSIDERATIONS ON WASTE TREATMENT AND DISPOSAL

HAZARDOUS WASTE NUMBER (40CFR261.21): D001**PRODUCT:**

After prior treatment, product may be disposed of in an incinerator for special waste adhering to the regulations pertaining to the disposal of special waste. Disposal must be made according to local and national regulations.

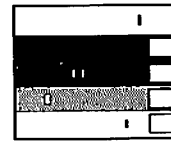
UNCLEANSSED PACKAGING:

Disposal must be made according to local and national regulations.

14. TRANSPORT INFORMATION

**CLASS 3, FLAMMABLE
LIQUIDS**

**NFPA CODES:
HEALTH - 2, FIRE - 3,
REACTIVITY - 0**



HMIS CODES

INTERNATIONAL TRANSPORTATION REGULATIONS

**PROPER SHIPPING NAME
AND DESCRIPTION:**

Flammable Liquid, n.o.s., (turpentine)

CHEMICAL NAME:

**GUM TURPENTINE, OIL OF TURPENTINE,
SPIRITS OF TURPENTINE**

10 - 11

Safety Data Sheet

LAND TRANSPORT (ADR / RID)

Jars (US D.O.T.):

CLASS:
PACKAGING GROUP:
JARS:
LABELS:

ORM-D, Consumer Commodity

CLASS 3, FLAMMABLE LIQUIDS
III
HAZARDOUS
ORM-D, Consumer Commodity

INLAND WATERWAY TRANSPORT

UN NUMBER: 1993
CLASS: 3 FLAMMABLE LIQUID
PACKAGING GROUP: III
LABELS: 3

AIR TRANSPORT (IATA / ICAO)

UN NUMBER: 1993
CLASS: 3 FLAMMABLE LIQUID
PACKAGING GROUP: III
LABELS: 3

MARINE TRANSPORT (IMDG)

UN NUMBER: 1993
CLASS: 3 FLAMMABLE LIQUID
PACKAGING GROUP: III
LABELS: 3
MARINE POLLUTANT YES (P)

15. REGULATORY INFORMATION

All compounds of this product are in compliance with inventory listing requirements of the U. S. Toxic Substance Control Act (TSCA) - Chemical Substance Inventory, EINECS - Europe, DSL - Canada, ENCS - Japan, AICS - Australia, IECS - China, PICCS - Philippines, and ECL - Korea.

Classification according to Directive 67/548/EEC - Annex I and Regulation (EC) N°1272/2008 - Annex VI



Xi - IRRITANT



Xn - HARMFUL

N - DANGEROUS FOR
THE ENVIRONMENT

RISK PHRASES:

R 10 FLAMMABLE
R 20/21/22 HARMFUL BY INHALATION, IN CONTACT WITH SKIN, AND IF SWALLOWED.

11 - 11

Safety Data Sheet

R 36/38	IRRITATING TO EYES AND SKIN.
R 43	MAY CAUSE SENSITIZATION BY SKIN CONTACT.
R 50/53	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
R 65	HARMFUL; MAY CAUSE LUNG DAMAGE IF SWALLOWED.
SAFETY PHRASES:	
S 36/37	WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES.
S 46	IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS SDS OR LABEL.
S 61	AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS / SAFETY DATA SHEETS.
S 62	IF SWALLOWED, DO NOT INDUCE VOMITING. SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS SDS OR LABEL.

16. OTHER INFORMATION

Chartpak, Inc. believes that such information is accurate and reliable as of the date of this SDS, but no representation, guarantee or warranty, expressed or implied, is made to the accuracy, or completeness of the information. Chartpak, Inc. urges users receiving this information to make their own determination as to the data's suitability and completeness for their particular application.