MATERIAL SAFETY DATA SHEET

VERSION 2 - CLP-GHS CLASSIFICATIONS **(EC) No. 1272/2008**

Ref: 92 – Pure Gum Turpentine Oil:

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY:

1.1 Product Name: **PURE GUM TURPENTINE / RECTIFIED TURPENTINE OIL BP**

1.2 Applications: High quality , naturally derived solvent for use with artists oil paints, removal of oil & grease stains and as a natural source of pine fragrance in formulated products

1.3 Supplier: Palace Chemicals Ltd; Speke Hall Industrial Estate; Speke; Liverpool; L24 1YA
Tel: 0151 486 6101; Fax 0151 448 1982
e-mail: sales@palacechemicals.co.uk; web: www.palacechemicals.co.uk

1.4 Emergency Telephone No. Tel: 0151 486 6101 – Mon-Fri: 0800 - 1800

2. HAZARDS IDENTIFICATION:

2.1
Classification :
(EC 1272/2008)

Physical - Flam. Liq. 3 - H226
Health - Acute Tox. 4 - H302; Acute Tox. 4 – H312; Acute Tox. 4 - H332;
Skin Irrit. 2 - H315; Eye Irritant - 2 - H319;Skin Sens. 1 - H317;Asp. Tox. 1 - H304
Environmental - Aquatic Chronic 2 - H411

2.2
Label elements:

Key Word: **DANGER**

Hazard statements:
H226 Flammable liquid and vapour.
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.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:
P101 - If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P261e Avoid breathing vapours.
P280 Wear protective gloves.
P331 Do NOT induce vomiting.
P304/340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P302/352 IF ON SKIN: Wash with plenty of soap and water.
P333+313If skin irritation or rash occurs get medical attention / advice
P362 Take off contaminated clothing and wash before re-use

2.3 Other hazards:
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303/361/353 IF ON SKIN Remove immediately all contaminated clothing.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

3.1 Substances: Pure Turpentine
3.2 Mixtures: Mixture of terpenes derived from pine oil extract

Name:	CAS / EC No.:	EC No.:	Concentration:	Classifications:
Pure Turpentine	8006-64-2	232-350-7	100.0%	H226; H304; H411; H312 H315; H317; H319; H332; H411
Alpha pinene	7785-70-8		50 - 58%	
Beta pinene	18172-67-3		30 – 38%	
Beta phellandrene	1329-99-3		3 – 5%	

4. FIRST AID MEASURES:

4.1 Description of measures:

EYE CONTACT: Irrigate thoroughly for 15 minutes with clean running water or a boric saline eye wash bottle. Seek medical attention should eye irritation persist or become inflamed.

INHALATION: Avoid working in a poorly ventilated, confined space. Remove to fresh air and rest. If irritation or breathing difficulties persist, seek medical attention.

SKIN CONTACT: Wash off skin with warm soapy water. Remove contaminated clothing and launder regularly. Prolonged and unattended contact should be avoided. Where irritation to skin is apparent seek medical attention.

INGESTION: Clean out mouth with copious volumes of water and drink plenty. Do not induce vomiting. Beware of aspiration if vomiting occurs. Seek prompt medical attention and show this data sheet

4.2 Acute & Chronic symptoms:

Inhalation: Vapours inhaled in strong concentration have a narcotic effect on the central nervous system. Irritation of the respiratory tract due to excessive fumes causes headache, drowsiness or other effects to the central nervous system, loss of consciousness.

Ingestion: Nausea, vomiting, abdominal pain.

Skin contact: Prolonged or repeated contact may cause irritation and dry skin.

Eye Contact: Burning feeling and temporary redness.

4.3 Immediate medical attention: This will be needed to resolve the most severe risk which is through ingestion as the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours).

5. FIRE FIGHTING MEASURES:

5.1 Extinguishing media: Dry powder; Foam, C02 – Do not use water jets.
5.2 Combustion Hazards: Hazardous decomposition when subject to combustion – will produce noxious, irritating fumes.
5.3 Advice for fire-fighters: Use approved self-contained breathing apparatus. Only use a fine water spray to cool down heat affected containers – not burning product. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

6. ACCIDENTAL RELEASE MEASURES:

6.1 Personal protection: Ventilate area and eliminate all sources of ignition. Wear personal protective equipment recommended in section 8.
6.2 Environmental precautions: Do not allow spill to enter drains or watercourses. Form a dam with sand, earth or a boom. Absorb, bund and scrape spillages onto sand, sawdust or absorbent granules.
6.3 Spill removal methods: Confine residues in clearly marked sealed containers for disposal in accordance with Local Authority regulations for flammable products – subject to special waste management controls.
6.4 References to other sections: Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. For waste disposal, see section 13.

7. HANDLING & STORAGE:

7.1 Safe handling precautions: Eliminate all sources of ignition. Risk of vapour concentration on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented. Use explosion proof electric equipment. Wear full protective clothing for prolonged exposure and/or high concentrations. Contaminated clothing and shoes must be discarded. Contaminated rags and cloths must be put in fireproof containers for disposal. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2 (a) Safe storage conditions: Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Take precautionary measures against static discharges.

7.2 (b) Incompatible materials: Keep away from oxidisers, heat and flames. May attack some plastics, rubber and coatings.

7.3 Specific end uses: The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION:

8.1 Control parameters

Substance:	8 hour exposure limit	15 minute exposure limit	Source. Type
White Spirit	WEL = 100 ppm 8hr TWA;	STEL = 150 ppm	

DNEL's - (Derived No effect levels) for workers:

Exposure pattern:	Route	DNEL	Dose descriptor
Acute systemic effects -	Dermal		
Acute systemic effects -	Inhalation		
Acute Local effects -	Dermal		
Acute Local effects -	Inhalation		
Long term systemic effects -	Dermal		
Long term systemic effects -	Inhalation		
Long term local effects -	Dermal		
Long term local effects -	Inhalation		

PNEC's - Predicted No effect concentration (Environment):

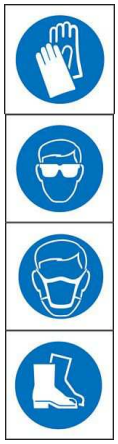
Compartment:	PNEC	Dose Descriptor
Fresh water -		
Sewage treatment -		

8.2 Exposure controls:

Engineering controls: Provide adequate general and local exhaust ventilation.

Respiratory protections: No specific recommendation is made, but appropriately specified respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection: Protective gloves must be used. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Use protective gloves made of nitrile.



Eye protection: BS 2092 approved safety Goggles should be worn for all applications to help prevent accidental face/eye contact.

Other Protection: Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures: **DO NOT SMOKE IN WORK AREA!**
Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9. PHYSICAL & CHEMICAL PROPERTIES:

Appearance:	Pale yellow clear liquid	**Relative density:**	0.855 – 0.865
Odour:	Pine Oil	**Water solubility:**	Nil
Odour threshold:	Lower	**Solubility in oils:**	100%
pH:	n/a	**Partition coefficient (Kow):**	n/a
Flash point:	36'C	**Auto-ignition temperature:**	>250
Melting point:	n/a	**Decomposition temperature:**	n/a
Boiling point:	150 – 170'C	**Surface tension:**	n/a
Evaporation rate:	< 1 (n-But Ac = 1)	**Viscosity:**	1.5 mm2/s
Upper/Lower Flam limits:	0.6% - 7.0%	**Explosive properties:**	May form explosive mixtures with air.
Vapour pressure:	< 5 kPa 20	**Oxidising properties:**	n/a
Vapour density:	n/a	**Particle size:**	n/a

10. STABILITY & REACTIVITY:

10.1 Conditions to avoid:	Sources of ignition. Avoid static discharge.	**10.4 Reactivity:**	Stable except when ignited
10.2 Incompatible Materials:	Acids & Oxidising agents	**10.5 Chemical reactivity:**	Stable under the prescribed storage conditions.
10.3 Decomposition hazards:	Fire creates toxic fumes	**10.6 Risk of hazardous reaction:**	None under normal use.

11. TOXICOLOGICAL INFORMATION:

11.1 Information on toxicological effects: This product has not been exhaustively tested. Judgements on the expected toxicity of this product have been made based upon consideration of its' major components.

Routes of exposure:	Inhalation, skin contact and ingestion.	**Skin Corrosivity / Irritation:**	May cause de-fatting of the skin,
Eye damage/irritation:	Burning feeling and temporary redness.	**Respiratory/skin sensitisation:**	irritation and sensitisation leading to dermatitis
Reproductive toxicity:	n/a	**Germ cell Mutagenicity:**	n/a
STOT single exposure:	LD50 > 3200mg/kg when rat ingested	**Carcinogenicity:**	No evidence of carcinogenic properties
STOT repeat exposure:	Target Organs - Central nervous system Respiratory system, lungs	**Aspiration hazard:**	The fluid can enter the lungs and cause damage (chemical pneumonitis, potentially fatal).

12. ECOLOGICAL INFORMATION:

12.1 Ecotoxicity:	LC50: 33 mg/litre LC100: 43 mg/litre	**12.4 Mobility in soil:**	75% degradable in 28 days
12.2 Bio-accumulative potential:	Negligible due to high volatility	**12.5 PBT and vPvB result:**	Not Classified as PBT/vPvB
12.3 Persistence & degradability:	The substance is readily biodegradable.	**12.6 Other adverse effects:**	n/a

13. DISPOSAL CONSIDERATIONS:

13.1 Waste treatment Methods: Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Waste is suitable for incineration. Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket. Where possible packaging should be collected for reuse or recycling. When this product, in its liquid state, as supplied becomes waste it should be disposed of as hazardous waste using the waste code 08 01 11 waste paint and varnish containing organic solvents or other dangerous substances. Empty used containers should be disposed of as waste code 15 01 10 packaging containing residues of or contaminated by dangerous substances. When used the removed sludge should be disposed of using waste code 08 01 13 for paint & varnish sludge materials. Any absorbents used for clearing up soils should be disposed of using waste code 15 02 02, for absorbents contaminated by dangerous substances.

14. TRANSPORT INFORMATION:

Transport Labels:

Regulatory Code (Land, Sea & Air):	ADR	IMDG	ICAO
14.1 UN No.:	1299	1299	1299
14.2 Proper shipping name:	PURE TURPENTINE OIL	PURE TURPENTINE OIL	PURE TURPENTINE OIL
14.3 ADR Packing Group:	III	**III**	III
14.4 Transport Hazard Class:	3	3.3 3391	3
14.5 Environmental hazards.	Marine pollutant	Marine pollutant	Marine pollutant
14.6 Special user precautions:	EAC Code - 3Y/30	EMS F-E, S-E	HAZCHEM CODE 3Y/30
14.7 Transport in bulk – IBC code:	HAZARD No. (ADR) 33	Tunnel Restriction Code (D/E)	

15. REGULATORY INFORMATION:

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

All components are listed as existing substances in Europe

UK Regulatory References:

Health and Safety at Work Act 1974. The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments. Chemicals (Hazard Information & Packaging) Regulations.

Environmental Listing - Control of Pollution Act 1974. Control of Pollution (Special Waste Regulations) Act 1980.

Statutory Instruments:

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes:

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

EU Legislation:

Dangerous Substance Directive 67/548/EEC.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European

Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

National Regulations:

Users of this product are reminded of their duties under the current Control of Substances Hazardous to Health Regulations and a suitable and sufficient assessment of all the risk should be undertaken before using this product. The guidelines given in the HSE publication COSHH ESSENTIALS - Easy Steps To Control Chemicals gives sound advice for deciding safe working control measures.

Authorisations (Title VII Regulation 1907/2006) - No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006) - No specific restrictions of use are noted for this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this product.

16. OTHER INFORMATION:

Last revision date: 17th July 2014

SDS No.: 92

List of abbreviations used in this SDS:

CAS	Chemical abstracts service
CLP	Classification, labelling & packaging regulation (EC) No. 1272/2008
DSD	Dangerous substances Directive 67/548/EEC
DPD	Dangerous Products Directive 1999/45/EC
PBT	Persistent, Bio-accumulative & Toxic
REACH	Registration, Evaluation, Authorisation & Restriction of Chemicals Regulation (EC) 1907/2006
vPvB	Very Persistent, very Bio-accumulative

References: Volume VII Approved supply list; EH40; Croner; Bulk supplier data sheets

Classification methods:

H Phrases in section 3:

H226 Flammable liquid and vapour.
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.
H411 Toxic to aquatic life with long lasting effects.

Training for workers:

Disclaimer:

The information supplied in this safety data sheet is intended to assist in the use of the above product without risk to safety and health and is based on current knowledge and experience of the associated physico-chemical hazards. The data does not signify any warranty with regard to the product's properties. This information may be used to assist in formulating a COSHH risk assessment if applied at work. This data sheet complies with EC Directive 91/155EC.