Revision Date 08/10/2012

Revision 4

Supersedes date 19/08/2011

SAFETY DATA SHEET DOUGLAS PURE TURPENTINE

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name DOUGLAS PURE TURPENTINE
Synonyms, Trade Names Pure Turpentine., Gum Turpentine

REACH Registration number 05-2114120812-61-0000

REACH Registration notesThe transition time according to REACH Regulations, Article 23 is still not expired. Therefore he number

quoted above is the Pre-registration number.

CAS-No. 8006-64-2 **EC No.** 232-350-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses A CLEANER AND THINNER FOR USE WITH ARTISTS OIL PAINTS SU 3 - INDUSTRIAL USES SU 21 -

CONSUMER USES SU 22 - PROFESSIONAL USES PC9a - COATINGS AND PAINTS, THINNERS

Uses advised against Any other use than described above.

1.3. Details of the supplier of the safety data sheet

Supplier Curust Industries Limited

Units12/13

Southern Cross Business Park

Bray. Co Wicklow

Ireland

+3531-2760800 +3531-2760799 info@curust.ie

1.4. Emergency telephone number

General public 01 8092166

National Emergency Telephone Number

National Poisons Information Service Ireland (medical professionals) 01 809 2566 or 01 837 9964.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Flam. Liq. 3 - H226

Human health Acute Tox. 4 - H302; Acute Tox. 4 - H312; Acute Tox. 4 - H332; Skin Irrit. 2 -

H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; Asp. Tox. 1 - H304

Environment Aquatic Chronic 2 - H411

Classification (67/548/EEC) Xn;R20/21/22, R65. Xi;R36/38. R43. N;R51/53. R10.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Human health

In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Irritating to eyes and skin. Harmful by inhalation, in contact with skin and if swallowed.

Environment

The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See section 12 as well.

Physical and Chemical Hazards

Vapours may be ignited by a spark, a hot surface or an ember. Heating will generate vapours which may form explosive vapour/air mixtures. Vapours are heavier than air and may travel along the floor and in the bottom of containers.

2.2. Label elements

 EC No.
 232-350-7

 Contains
 TURPENTINE, OIL

Label In Accordance With (EC) No. 1272/2008









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

P102 Keep out of reach of children.
P261 Avoid breathing vapours.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves, eye and face protection.
P271 Use only outdoors or in a well-ventilated area.

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P332+313 If skin irritation occurs: Get medical advice/attention.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P403 Store in a well-ventilated place.

P405 Store locked up.

Supplementary Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

TURPENTINE, OIL 100%

CAS-No.: 8006-64-2 EC No.: 232-350-7

Classification (EC 1272/2008) Classification (67/548/EEC)

Flam. Liq. 3 - H226

Acute Tox. 4 - H302 Xn;R20/21/22,R65

Acute Tox. 4 - H312 R43
Acute Tox. 4 - H332 Xi;R36/38
Skin Irrit. 2 - H315 N;R51/53

Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

REACH Registration number 05-2114120812-61-0000

REACH Registration notesThe transition time according to REACH Regulations, Article 23 is still not expired. Therefore he number

quoted above is the Pre-registration number.

CAS-No. 8006-64-2

EC No. 232-350-7

Ingredient notes

Substance with National workplace exposure limits.

Composition Comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

CAUTION! First aid personnel must be aware of own risk during rescue! IN CASE OF SERIOUS OF PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Inhalation

Remove victim immediately from source of exposure. Move injured person into fresh air and keep person calm under observation. If necessary, seek hospital and bring these instructions. Place unconscious person on the side in the recovery position and ensure breathing can take place. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

Eve contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing.

4.2. Most important symptoms and effects, both acute and delayed

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation

May cause an asthma-like shortness of breath.

Ingestion

May cause chemical burns in mouth and throat. May cause discomfort if swallowed.

Skin contact

Skin irritation.

Eye contact

Irritating and may cause redness and pain.

4.3. Indication of any immediate medical attention and special treatment needed

Aspiration hazard if swallowed. Contact a poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Fire can be extinguished using: Water spray, fog or mist. Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

During fire, toxic gases (CO, CO2) are formed.

Unusual Fire & Explosion Hazards

May form explosive mixture with air at very high concentration. Vapour explosion and poison hazard indoors, outdoors and in sewers. Heat may cause the containers to explode.

Specific hazards

The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Containers close to fire should be removed or cooled with water. Keep run-off water out of sewers and water sources. Dike for water control.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. DO NOT touch spilled material! Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Dam and absorb spillages with sand, earth or other non-combustible material. Cover large spillage with alcohol-resistant foam. Dam and absorb spillage with sand, earth or other non-combustible material. Collect with absorbent, non-combustible material into suitable containers. Clean contaminated area with oil-removing material. Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in the immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, basements or confined areas. A vapour-suppressing foam may be used to reduce vapour. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Water Spill: Stop leak if you can do so without risk. Eliminate sources of ignition. Warn or evacuate occupants in surrounding and downwind areas if required, dur to the toxcity or flammability of the material. If the flashpoint exceeds the ambient air temperature by 10 degrees C or more, use containment booms and remove from the surface by skimming or with suitable absorbents. If the falshpoint does not exceed the ambient air temperature by at least 10 degrees C, use booms as a barrier to protect shorelines and allow material to evaporate. Seek the advice of a specialist before using dispersants.

6.4. Reference to other sections

For personal protection, see section 8. The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See section 12 as well. See section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. 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. Storage tanks and other containers must be grounded. Contaminated rags and cloths must be put in fireproof containers for disposal. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. Do not handle broken packages without protective equipment. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not use in confined spaces without adequate ventilation and/or respirator. Mechanical ventilation or local exhaust ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container. Keep away from heat, sparks and open flame. Protect against physical damage and/or friction. Store away from: Oxidising material. Packages should be stored in a dry well ventilated area, ensure packages are tightly closed when not in use. **Storage Class**

Flammable liquid storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Usage Description

Keep containers closed when not in use. Keep out of reach of children. Apply "common sense" measures when using this product. Avoid all contact with skin and eyes.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
TURPENTINE, OIL	WEL	100 ppm	566 mg/m3	150 ppm	850 mg/m3	

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment





Process conditions

Provide eyewash station. Use engineering controls to reduce air contamination to permissible exposure level.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

Respiratory equipment

Wear mask supplied with: Gas cartridge suitable for organic substances.

Hand protection

Use protective gloves made of: Neoprene. Nitrile. Rubber (natural, latex).

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Clear liquid.

Colour Light (or pale).

Odour Pine

Solubility Insoluble in water
Initial boiling point and boiling range 157-170 94% MAX

(°C)

ASTM D 233-13

Melting point (°C)
Not determined.

Relative density 0.855 - 0.868 g/cm3 25

ASTM D 233-11

Vapour density (air=1)

No information available.

Vapour pressure 4 mm Hg 20

Evaporation rate <1 (Butyl acetate =1)

pH-Value, Conc. Solution

Not applicable.

Viscosity 1.5 cP 25

<0.1%

Flash point (°C) 34-38

ASTM D 56

Auto Ignition Temperature (°C)

>250

Explosive properties

May form explosive mixtures with air. The material can accumulate static charge and can therefore cause electrical ignition.

Oxidising properties

Does not meet the criteria for oxidising.

Comments Information declared as "Not available, Not relevant or Not applicable" is not considered justified for

enabling proper control measures to be taken.

9.2. Other information

Volatile By Vol. (%) 100
Volatile Organic Compound (VOC) 855-868g/l

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

May react exothermically with reducing agents to release hydrogen gas.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Burning generates CO, CO2 and acrid smoke.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong oxidising substances.

10.6. Hazardous decomposition products

In fire, emits oxides of carbon and acrid smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50

>3200 mg/kg (oral rat)

Toxic Dose 2 - LD 50

>2000mg/kg Dermal (rabbit)

Other Health Effects

Harmful: if swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions)medical survey for 48 hours min).

Acute toxicity:

Acute Toxicity (Oral LD50)

> 3200 mg/kg Rat

OECD 401

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rabbit

OECD 404. Moderate irritation (RIFM) Full strength 24 hr under occlusion (rabbit).

Acute Toxicity (Inhalation LC50)

~ 13.5 mg/l (vapours)

Skin Corrosion/Irritation:

Skin Mild Irrit 3 - No data available.

Irritating.

Serious eye damage/irritation:

Eye irritant 2A - irritant effects (RIFM) full strength to conjunctival sac (rabbit) (TDS).

Respiratory or skin sensitisation:

Skin Sens. 1B - No data available

Sensitisina.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Not applicable.

Ames Test

Genotoxicity - In Vivo

Not applicable.

Ames Test

Carcinogenicity:

Carcinogenicity

Not applicable.

Based on available data, the classification criteria is not met.

This product is not classified carcinogenic.

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Not applicable.

Reproductive Toxicity - Development

Not applicable.

Aspiration hazard:

Viscosity

Kinematic viscosity <= 20.5 mm2/s.

Aspiration hazard - category 1

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation

May cause irritation to mucous membranes. Symptoms may include sore throat, CNS depression. nausea, vomiting, abdominal pains and diarrhoea.

Ingestion

Harmful if swallowed.

Skin contact

May cause sensitisation by skin contact. Prolonged contact may cause redness, irritation and dry skin.

Eye contact

Irritating and may cause redness and pain.

Route of entry

Inhalation. Skin absorption. Ingestion. Skin and/or eye contact.

Target Organs

Central nervous system Eyes Gastro-intestinal tract Mucous membranes Respiratory system, lungs Skin

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Acute Fish Toxicity

Toxic to aquatic environment and may cause long term adverse effects.

LC 50, 96 Hrs, Fish mg/l 33

Acute Toxicity - Fish

LC0 ~ 26 mg/l

LC100 ~ 43 mg/l

Classified as toxic to aquatic organisms.

EC 50, 48 Hrs, Daphnia, mg/l 10-100
IC 50, 72 Hrs, Algae, mg/l >100

12.2. Persistence and degradability

Degradability

Complete in 28 days. OECD 301E - readily biodegradable material modified screening test. OECD 302C - inherent biodegradability modified MITI east (No 2)

12.3. Bioaccumulative potential

Bioaccumulative potential

Will not bio-accumulate.

12.4. Mobility in soil

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Make sure containers are empty before discarding (explosion risk). Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Do not allow runoffs! This chemical is toxic to organisms in water. Incinerate in suitable combustion chamber. Waste material is classified as hazardous waste and should be disposed of by incineration or collected by a registered waste disposal company, operating within the scope of the Hazardous waste Regulations 2005 in the UK or local equivalent regulations in other countries.

Waste Class

These codes have been assigned based on the actual composition of the product both as supplied and as dried residues. If mixed with other wastes, the waste codes quoted may not be applicable. When this product in its liquid state as supplied becomes waste it should be disposed of as hazardous waste using waste code 14.06.03. Any absorbents used for clearing up spills should be disposed of using waste code 15 02 02 absorbents contaminated by dangerous substances. Empty used containers should be disposed of as waste code 15 01 10 packaging containing residues of or contaminated by dangerous substances.

SECTION 14: TRANSPORT INFORMATION

General LIMITED QUANITY SIZE IS 5 LITRES

14.1. UN number

UN No. (IMDG) 1299 UN No. (IMDG) 1299 UN No. (ICAO) 1299

14.2. UN proper shipping name

Proper Shipping Name TURPENTINE

14.3. Transport hazard class(es)

ADR/RID/ADN Class 3

ADR/RID/ADN Class Class 3: Flammable liquids.

ADR Label No. 3
IMDG Class 3
ICAO Class/Division 3

Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group III

IMDG Packing group III

ICAO Packing group III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS F-E, S-E

Hazard No. (ADR) 30 Flammable liquid (flash-point between 23°C and 60°C, inclusive) or flammable liquid or solid in the

molten state with a flash-point above 60°C, heated to a temperature equal to or above its flash-point, or

self heating liquid.

Tunnel Restriction Code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

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. Rivers (Prevention of Pollution) Act 1961.

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. 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.

National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Workplace Exposure Limits 2005 (EH40) Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007 (CDG 2007). 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

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Training Advice

The information on directions for use can be found on the product label. It is important to ensure that anyone using this product in the workplace has been adequately trained and in particular: The use of personal protective equipment. methods of cleaning up and disposal of waste. The basic first aid arrangements.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date 08/10/2012

Revision 4

Supersedes date 19/08/2011

Risk Phrases In Full

R10 Flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R65 Harmful: may cause lung damage if swallowed.

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Disclaimer

The information contained in this data sheet is provided in accordance with the requirements of the Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) The product should not be used for purposes other than those shown in Section 1.2. As the specific conditions of use are outside the suppliers control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet is based on the present knowledge and the current EC and Uk Legislation. It provides guidance on health, safety and environmental aspects of the product and should not be taken as a product specification.