



SAFETY DATA SHEET GARLAND THINNERS

According to Regulation (EU) No 453/2010

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

1.1. Product identifier

Product name GARLAND THINNERS
Product No. A1065

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

Identified uses Paint thinner.

1.3. Details of the supplier of the safety data sheet

Supplier Garland Company UK Ltd,
Unit 5, Glevum Works,
Upton Street,
Gloucester GL1 4LA
UK
Tel: 01452 330 646
Fax: 01452 330 657
email: info@garlandukltd.co.uk

1.4. Emergency telephone number

01452 330646
09:00 - 17:00 Monday to Friday

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xn;R20, R65. R43. R10, R52/53.

Human health

Harmful by inhalation. The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Environment

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Physical and Chemical Hazards

Flammable. Vapours are heavier than air and may travel along the floor and in the bottom of containers.

2.2. Label elements

Contains ISOPHORONEDIISOCYANATE HOMOPOLYMER
LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.

Labelling



Harmful

Risk Phrases

R10	Flammable.
R20	Harmful by inhalation.
R43	May cause sensitisation by skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.

Safety Phrases

S24	Avoid contact with skin.
S37	Wear suitable gloves.

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S51	Use only in well-ventilated areas.
S60	This material and its container must be disposed of as hazardous waste.
S62	If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
P4	Contains isocyanates. See information supplied by the manufacturer.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

1,2,4-TRIMETHYLBENZENE	1-5%
CAS-No.: 95-63-6	EC No.: 202-436-9
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT Single 3 - H335 Aquatic Chronic 2 - H411	Classification (67/548/EEC) R10 Xn;R20 Xi;R36/37/38 N;R51/53
2-METHOXY-1-METHYLETHYL ACETATE	10-30%
CAS-No.: 108-65-6	EC No.: 203-603-9
Classification (EC 1272/2008) Flam. Liq. 3 - H226	Classification (67/548/EEC) R10
ISOPHORONE DI-ISOCYANATE	< 1%
CAS-No.: 4098-71-9	EC No.: 223-861-6
Classification (EC 1272/2008) Acute Tox. 3 - H331 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT Single 3 - H335 Aquatic Chronic 2 - H411	Classification (67/548/EEC) T;R23 R42/43 Xi;R36/37/38 N;R51/53
ISOPHORONEDIISOCYANATE HOMOPOLYMER	10-30%
CAS-No.: 53880-05-0	EC No.:
Classification (EC 1272/2008) Skin Sens. 1 - H317	Classification (67/548/EEC) R43.
LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.	10-30%
CAS-No.: 64742-95-6	EC No.: 265-199-0
Classification (EC 1272/2008) Flam. Liq. 3 - H226 STOT Single 3 - H335 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. Xi;R37. N;R51/53. R10.

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MESITYLENE		1-5%
CAS-No.: 108-67-8		EC No.: 203-604-4
Classification (EC 1272/2008) Flam. Liq. 3 - H226 STOT Single 3 - H335 Aquatic Chronic 2 - H411	Classification (67/548/EEC) R10 Xi;R37 N;R51/53	
PROPYLBENZENE		< 1%
CAS-No.: 103-65-1		EC No.: 203-132-9
Classification (EC 1272/2008) Flam. Liq. 3 - H226 STOT Single 3 - H335 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) R10 Xn;R65 Xi;R37 N;R51/53	
XYLENE		1-5%
CAS-No.: 1330-20-7		EC No.: 215-535-7
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315	Classification (67/548/EEC) R10 Xn;R20/21 Xi;R38	

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

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention immediately!

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye 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. Continue to rinse for at least 15 minutes and get medical attention.

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

Inhalation.

Irritation of nose, throat and airway. Onset of symptoms may be delayed.

Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin contact

Prolonged contact may cause redness, irritation and dry skin. May cause allergic skin disorders in sensitive individuals. Onset of symptoms may be delayed.

Eye contact

May irritate eyes.

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

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

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

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

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

Unusual Fire & Explosion Hazards

Vapours may ignite.

Specific hazards

In case of fire, toxic gases may be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours. Containers close to fire should be removed immediately 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

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference 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. Collect and dispose of spillage as indicated in section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Eliminate all sources of ignition. Provide good ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes. Persons susceptible to allergic reactions should not handle this product.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in tightly closed original container in a dry, cool and well-ventilated place. Avoid contact with oxidising agents.

Storage Class

Flammable liquid storage.

7.3. Specific end use(s)

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
1,2,4-TRIMETHYLBENZENE	WEL	25 ppm	125 mg/m3			
2-METHOXY-1-METHYLETHYL ACETATE	WEL	50 ppm	274 mg/m3	100 ppm	548 mg/m3	Sk
MESITYLENE	WEL	25 ppm	125 mg/m3			
XYLENE	WEL	50 ppm	220 mg/m3	100 ppm	441 mg/m3	Sk

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Use protective gloves made of: Polyvinyl chloride (PVC). Neoprene. or Nitrile. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Wear approved safety goggles.

Other Protection

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

Hygiene measures

Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke. Wash hands after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Solubility	Reacts with water.
Initial boiling point and boiling range	146°C
Relative density	1.21
Evaporation rate	Moderate
Viscosity	Viscous
Flash point (°C)	40°C
Auto Ignition Temperature (°C)	315°C
Flammability Limit - Lower(%)	1.5%
Flammability Limit - Upper(%)	10.8%

9.2. Other information

Not determined.

Volatile Organic Compound (VOC) 130 g/litre

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Strong oxidising substances. Acids.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

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Not available.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with acids and oxidising substances. Water, moisture.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Acids. Water.

10.6. Hazardous decomposition products

In case of fire, toxic gases may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

Harmful by inhalation.

Ingestion

Harmful: may cause lung damage if swallowed.

Skin contact

Liquid may irritate the skin. May cause sensitisation by skin contact.

Eye contact

May irritate eyes.

Medical Considerations

Skin disorders and allergies. Chronic respiratory and obstructive airway diseases.

Name	XYLENE
Toxic Dose 1 - LD 50	3523 - 7800 mg/kg (oral rat)
Toxic Dose 2 - LD 50	> 2000 mg/kg (skin-rbt)
Toxic Conc. - LC 50	6350 mg/l/4h (inh-rat)
Name	PROPYLBENZENE
Toxic Dose 1 - LD 50	6040 mg/kg (oral rat)
Name	MESITYLENE
Toxic Dose 1 - LD 50	7000 mg/kg (oral rat)
Toxic Dose 2 - LD 50	5000 mg/kg (oral-mouse)
Toxic Conc. - LC 50	24000 mg/l/4h (inh-rat)
Name	ISOPHORONE DI-ISOCYANATE
Toxic Dose 1 - LD 50	> 1269 mg/kg (oral rat)
Toxic Dose 2 - LD 50	>2645 mg/kg (oral-mouse)
Toxic Conc. - LC 50	0.123 - 0.67 mg/l/4h (inh-rat)
Name	1,2,4-TRIMETHYLBENZENE
Toxic Dose 1 - LD 50	5000 mg/kg (oral rat)
Name	2-METHOXY-1-METHYLETHYL ACETATE
Toxic Dose 1 - LD 50	8532 mg/kg (oral rat)
Toxic Dose 2 - LD 50	750 mg/kg (ipr-mouse)
Name	ISOPHORONEDIISOCYANATE HOMOPOLYMER
Toxic Dose 1 - LD 50	5490 mg/kg (oral rat)
Toxic Conc. - LC 50	123 mg/l/4h (inh-rat)
Name	LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT
Toxic Dose 1 - LD 50	8400 mg/kg (oral rat)
Toxic Conc. - LC 50	> 5.2 mg/l/4h (inh-rat)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

12.2. Persistence and degradability

Degradability

Partially biodegradable.

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12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

Reacts with water.

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Other adverse effects

Not determined.

Name	XYLENE
LC 50, 96 Hrs, Fish mg/l	13.5 - 1090
IC 50, 72 Hrs, Algae, mg/l	10
Name	PROPYLBENZENE
LC 50, 96 Hrs, Fish mg/l	40 - 60
Name	MESITYLENE
LC 50, 96 Hrs, Fish mg/l	12.52
EC 50, 48 Hrs, Daphnia, mg/l	6
Name	ISOPHORONE DI-ISOCYANATE
LC 50, 96 Hrs, Fish mg/l	1.8 - 4
EC 50, 48 Hrs, Daphnia, mg/l	1.8
Name	1,2,4-TRIMETHYLBENZENE
LC 50, 96 Hrs, Fish mg/l	7.72
EC 50, 48 Hrs, Daphnia, mg/l	3.6
Name	2-METHOXY-1-METHYLETHYL ACETATE
LC 50, 96 Hrs, Fish mg/l	100 - 180
EC 50, 48 Hrs, Daphnia, mg/l	> 405
Name	ISOPHORONEDIISOCYANATE HOMOPOLYMER
Ecotoxicity	
No data on possible environmental effects have been found.	
Name	LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.
LC 50, 96 Hrs, Fish mg/l	9.22 - 119
EC 50, 48 Hrs, Daphnia, mg/l	6.14
IC 50, 72 Hrs, Algae, mg/l	3.29 - 56

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263

14.2. UN proper shipping name

Proper Shipping Name PAINT RELATED MATERIAL

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

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ICAO Class/Division 3
Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group II
IMDG Packing group II
ICAO Packing group II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

EMS F-E, S-E
Emergency Action Code •3YE
Hazard No. (ADR) 33
Tunnel Restriction Code (D/E)

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

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

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.

EU Legislation

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.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

This is first issue.

Revision Date 07-2011

GARLAND THINNERS

Risk Phrases In Full

R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R20	Harmful by inhalation.
R65	Harmful: may cause lung damage if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R42/43	May cause sensitisation by inhalation and skin contact.
R43	May cause sensitisation by skin contact.
R23	Toxic by inhalation.
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.
H312	Harmful in contact with skin.
H304	May be fatal if swallowed and enters airways.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H331	Toxic if inhaled.
H411	Toxic to aquatic life with long lasting effects.