SAFETY DATA SHEET
ARDEX AF 625

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

1.1. Product identifier

Product name	ARDEX AF 625
Product No.	25178

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

Identified uses	Adhesive.

1.3. Details of the supplier of the safety data sheet

Supplier	Ardex UK Limited Homefield Road Haverhill Suffolk CB9 8QP Tel. 01440 714939 Fax. 01440 716667 e-mail: safetydatasheets@ardex.co.uk
Contact Person	Mr. Ian Smith, Laboratory Manager

1.4. Emergency telephone number

+44 (0) 870 190 6777 (24 hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq. 2 - H225
Human health	Skin Irrit. 2 - H315;Eye Irrit. 2 - H319;STOT SE 3 - H336
Environment	Aquatic Chronic 2 - H411

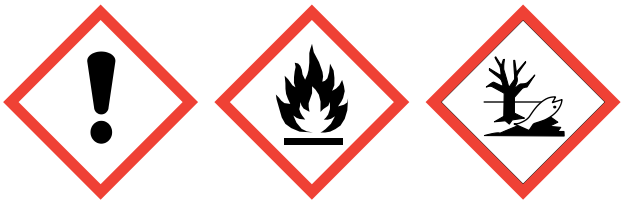
Classification (1999/45/EEC) Xn;R65. Xi;R36. F;R11. N;R51/53. R66, R67.

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

2.2. Label elements

Contains Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics<0.1%benzene

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



Signal Word Danger

Hazard Statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements

P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P501	Dispose of contents/container in accordance with local regulations.
	Dispose of contents/container in accordance with regional regulations.
	Dispose of contents/container in accordance with national regulations.
	Dispose of contents/container in accordance with international regulations.

Supplementary Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P243	Take precautionary measures against static discharge.
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.
P261	Avoid breathing vapour/spray.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

4-TERT-BUTYLPHENOL — < 1%

CAS-No.: 98-54-4 — EC No.: 202-679-0

Classification (EC 1272/2008)	Classification (67/548/EEC)
Skin Irrit. 2 - H315	Xi;R36/37/38.
Eye Irrit. 2 - H319	N;R51/53.
STOT SE 3 - H335	
Aquatic Chronic 2 - H411	

ACETONE — 15-30%

CAS-No.: 67-64-1 — EC No.: 200-662-2 — Registration Number: 01-2119471330-49

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
EUH066	Xi;R36
Eye Irrit. 2 - H319	R66
STOT SE 3 - H336	R67

BUTANONE — 15-30%

CAS-No.: 78-93-3 — EC No.: 201-159-0 — Registration Number: 01-211945729043

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
EUH066	Xi;R36
Eye Irrit. 2 - H319	R66
STOT SE 3 - H336	R67

ETHYL ACETATE — 15-30%

CAS-No.: 141-78-6 — EC No.: 205-500-4 — Registration Number: 01-2119475103-46

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
EUH066	Xi;R36
Eye Irrit. 2 - H319	R66
STOT SE 3 - H336	R67

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics<0.1%benzene — 30 - 60 %

CAS-No.: — EC No.: 920-750-0 — Registration Number: 01-2119473851-33

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Sol. 1 - H228	Xn;R65.
EUH066	F;R11.
STOT SE 3 - H336	N;R51/53.
Asp. Tox. 1 - H304	R66,R67.
Aquatic Chronic 2 - H411	

XYLENE — < 1%

CAS-No.: 1330-20-7 — EC No.: 215-535-7 — Registration Number: 01-2119488216-32

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 3 - H226	R10
Acute Tox. 4 - H312	Xn;R20/21
Acute Tox. 4 - H332	Xi;R38
Skin Irrit. 2 - H315	

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

Ingredient notes

Dangerous components: void

Composition Comments

The data shown are in accordance with the latest EC Directives. Toluene conent = 0.0003%

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

No recommendation given.

Inhalation

Remove victim immediately from source of exposure. Move the exposed person to fresh air at once. In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and drink plenty of water. If person becomes uncomfortable or if ingested in large amounts (50-100 ml for an adult person): Take to hospital along with these instructions.

Skin contact

Remove contaminated clothing and flush with plenty of water until pain disappears. If discomfort persists transport to hospital and bring these instructions.

Eye contact

No recommendation given, but first aid may still be required in case of accidental exposure of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

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

Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion

May cause stomach pain or vomiting.

Skin contact

Prolonged contact may cause redness, irritation and dry skin.

Eye contact

Irritating and may cause redness and pain.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

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. Vapours are heavier than air and may spread near ground to sources of ignition.

Specific hazards

Fire creates: Irritating gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Halogenated hydrocarbons. 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

Avoid breathing fire vapours. Ventilate closed spaces before entering them. NOTE! Use air-supplied respirators to protect against gases\fumes. Cool containers exposed to flames with water until well after the fire is out.

Protective equipment for fire-fighters

Wear full protective clothing. Use air-supplied respirator during fire fighting. Face mask, protective gloves and safety helmet.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Use protective gloves, goggles and suitable protective clothing.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Ventilate well. Absorb with sand or other inert absorbent.

6.4. Reference to other sections

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

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid inhalation of vapours/spray and contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place.

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

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ACETONE	WEL	500 ppm	1210 mg/m3	1500 ppm	3620 mg/m3	
BUTANONE	WEL	200 ppm	600 mg/m3	300 ppm	899 mg/m3	Sk
ETHYL ACETATE	WEL	200 ppm		400 ppm		
XYLENE	WEL	50 ppm	220 mg/m3	100 ppm	441 mg/m3	Sk

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

XYLENE (CAS: 1330-20-7)

DNEL				
Consumer	Dermal	Long Term	Systemic Effects	108 mg/kg/day
Industry	Dermal	Long Term	Systemic Effects	180 mg/kg/day
Consumer	Inhalation.	Short Term	Local Effects	174 mg/m3
Consumer	Inhalation.	Short Term	Systemic Effects	174 mg/m3
Industry	Inhalation.	Short Term	Systemic Effects	289 mg/m3
Industry	Inhalation.	Short Term	Local Effects	289 mg/m3
Consumer	Inhalation.	Long Term	Systemic Effects	14, 8 mg/m3
Industry	Inhalation.	Long Term	Systemic Effects	77 mg/m3

ACETONE (CAS: 67-64-1)

DNEL				
Industry	Dermal	Short Term	Systemic Effects	186 mg/m3
Industry	Inhalation.	Short Term	Local Effects	2420 mg/m3
Industry	Inhalation.	Long Term	Systemic Effects	1210 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	62 mg/m3
Consumer	Inhalation.	Long Term	Systemic Effects	200 mg/m3
Consumer	Oral	Long Term	Systemic Effects	62 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	186 mg/kg/day
PNEC				
Freshwater	10, 6	mg/l		
Marinewater	1, 06	mg/l		
Water	Short Term	21	mg/l	
Soil	29, 5	mg/kg		
Sediment (Marinewater)	3, 04	mg/kg		
Sediment (Freshwater)	30, 4	mg/kg		
STP	100	mg/l		

BUTANONE (CAS: 78-93-3)

DNEL				
Consumer	Oral	Long Term	Systemic Effects	31 mg/kg/day
Consumer	Dermal	Long Term	Systemic Effects	412 mg/kg/day
Industry	Dermal	Long Term	Systemic Effects	1161 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	106 mg/m3
Industry	Inhalation.	Long Term	Systemic Effects	600 mg/m3
PNEC				
Freshwater	Long Term	55, 8	mg/l	
Marinewater	Long Term	55, 8	mg/l	
Intermittent release	Intermittent release	55, 8	mg/l	
STP	Long Term	709	mg/l	
Sediment (Marinewater)	Long Term	284, 7	mg/kg	
Soil	Long Term	22, 5	mg/kg	
Sediment (Freshwater)	284, 7	mg/kg		

ETHYL ACETATE (CAS: 141-78-6)

DNEL				
Industry	Inhalation.	Short Term	Systemic Effects	1468 mg/m3
Industry	Inhalation.	Short Term	Local Effects	1468 mg/m3
Consumer	Inhalation.	Short Term	Systemic Effects	734 mg/m3
Consumer	Inhalation.	Short Term	Local Effects	734 mg/m3
Industry	Inhalation.	Long Term	Local Effects	734 mg/m3
Industry	Dermal	Long Term	Systemic Effects	63 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	734 mg/kg/day
Consumer	Dermal	Long Term	Systemic Effects	37 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	367 mg/m3
PNEC				
Freshwater	0, 26	mg/l		
Marinewater	0, 026	mg/l		
Sediment	0, 125	mg/l		
STP	650	mg/l		
Sediment (Freshwater)	1, 25	mg/l		
Intermittent release	1, 65	mg/l		
Soil	0, 24	mg/kg		

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics<0.1%benzene

DNEL				
Consumer	Oral	Long Term	Systemic Effects	699 mg/kg/day
Consumer	Dermal	Long Term	Systemic Effects	699 mg/kg/day
Industry	Dermal	Long Term	Systemic Effects	773 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	608 mg/m3
Industry	Inhalation.	Long Term	Systemic Effects	2035 mg/m3

8.2. Exposure controls

Protective equipment

Process conditions

Use engineering controls to reduce air contamination to permissible exposure level.

Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. Provide explosion proof ventilation for high concentrations.

Respiratory equipment

In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P3).

Hand protection

Use protective gloves made of: Nitrile.

Eye protection

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

Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Wash promptly with soap & water if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Amber.
Odour	Organic solvents.
Solubility	Slightly soluble in water.
Melting point (°C)	
Not applicable.	
Relative density at 20°C	0, 88 g/cm³
Bulk Density	
Not applicable.	
Vapour density (air=1)	
Not relevant	
Vapour pressure	
Not available.	
Evaporation rate	
Not available.	
Evaporation Factor	
Not available.	
pH-Value, Conc. Solution	8
Viscosity	5500 - 6500 cP 20°C
Solubility Value (G/100G H2O@20°C)	
Not available.	
Decomposition temperature (°C)	
Not available.	
Odour Threshold, Lower	
Not relevant	
Odour Threshold, Upper	
Not relevant	
Flash point (°C)	- 7 CC CC (Closed cup).
Auto Ignition Temperature (°C)	
Not applicable.	
Flammability Limit - Lower(%)	0.9
Flammability Limit - Upper(%)	13
Explosive properties	
Not applicable.	

Other Flammability
Not applicable.
Oxidising properties
Not applicable.

9.2. Other information

Particle Size (Micron)
Not relevant

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not applicable.
Hazardous Polymerisation
Not relevant

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid
No incompatible groups noted.

10.6. Hazardous decomposition products

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO_2). Hydrogen chloride (HCl).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation
Vapours may cause drowsiness and dizziness.

Skin contact
Irritating to skin.

Eye contact
Irritating to eyes.
Route of entry
Skin absorption.

Toxicological information on ingredients.

ACETONE (CAS: 67-64-1)

Acute toxicity:
Acute Toxicity (Oral LD50)
5800 mg/kg Rat

Acute Toxicity (Dermal LD50)
7400 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)
76 mg/l (vapours) Rat 4 hours

BUTANONE (CAS: 78-93-3)

Acute toxicity:

Acute Toxicity (Oral LD50)

> 2193 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 5000 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

> 5000 mg/l (vapours) Rat 4 hours

ETHYL ACETATE (CAS: 141-78-6)

Toxic Dose 1 - LD 50

4100 mg/kg (oral-mouse)

Toxic Dose 2 - LD 50

4934 mg/kg (oral-rbt)

Acute toxicity:

Acute Toxicity (Oral LD50)

5620 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 20000 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

> 30 mg/l (vapours) Rat

Respiratory or skin sensitisation:

Skin sensitisation

Not relevant

Guinea pig maximization test (GPMT): Guinea Pig

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Fertility: NOAEL 20, 000 ppm Inhalation. Rat

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Dangerous for the environment if discharged into watercourses. The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

Ecological information on ingredients.

ACETONE (CAS: 67-64-1)

LC 50, 96 Hrs, Fish mg/l

> 100

Acute Toxicity - Fish

LC50 96 hours 8300 mg/l Lepomis macrochirus (Bluegill)

LC50 96 hours 5540 mg/l Onchorhynchus mykiss (Rainbow trout)

EC 50, 48 Hrs, Daphnia, mg/l

8800

IC 50, 72 Hrs, Algae, mg/l

> 100

Acute Toxicity - Aquatic Plants

NOEC 96 hours 430 mg/l Freshwater algae

NOEC 28 days > 10-<100 mg/l Freshwater invertebrates

BUTANONE (CAS: 78-93-3)

LC50 96 hours 2993 mg/l Pimephales promelas (Fat-head Minnow)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 308 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 96 hours 2029 mg/l Freshwater algae

Acute Toxicity - Microorganisms

EC50 96 hours > 50 mg/l Activated sludge

ETHYL ACETATE (CAS: 141-78-6)

LC 50, 96 Hrs, Fish mg/l

230

Acute Toxicity - Fish

LC50 48 hours 333 mg/l Leuciscus idus (Golden orfe)

EC 50, 48 Hrs, Daphnia, mg/l

717 mg/l

Acute Toxicity - Aquatic Plants

EC50 48 hours 3300 mg/l Scenedesmus subspicatus

12.2. Persistence and degradability

Degradability

The product is expected to be slowly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Ecological information on ingredients.

ACETONE (CAS: 67-64-1)

Bioaccumulative potential

Will not bio-accumulate.

Bioaccumulation factor

BCF < 10

BUTANONE (CAS: 78-93-3)

Bioaccumulative potential

The product is not bioaccumulating.

ETHYL ACETATE (CAS: 141-78-6)

Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

Bioaccumulation factor

BCF 30 Leuciscus idus (Golden orfe)

Partition coefficient

log Pow 0, 73

12.4. Mobility in soil

Mobility:

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

Ecological information on ingredients.

BUTANONE (CAS: 78-93-3)

Mobility:

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

ETHYL ACETATE (CAS: 141-78-6)

Mobility:

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

Adsorption/Desorption Coefficient

Soil Koc 1.43 25

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.

ACETONE (CAS: 67-64-1)

This product does not contain any PBT or vPvB substances.

BUTANONE (CAS: 78-93-3)

This product does not contain any PBT or vPvB substances.

ETHYL ACETATE (CAS: 141-78-6)

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1133
UN No. (IMDG)	1133
UN No. (ICAO)	1133

14.2. UN proper shipping name

Proper Shipping Name	ADHESIVES (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics<0.1%benzene)

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	II
IMDG Packing group	II
ICAO Packing group	II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

14.6. Special precautions for user

EMS	F-E, S-D
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

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
Environmental Listing
Control of Pollution Act 1974.
Statutory Instruments
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).
Approved Code Of Practice
Safety Data Sheets for Substances and Preparations.
Guidance Notes
Workplace Exposure Limits EH40.
EU Legislation
Dangerous Substance Directive 67/548/EEC.
National Regulations
Health and Safety at Work Act (As Amended) 1974

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

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

Issued By	Mr. Ian Smith, Laboratory Manager (Telephone:01440 714939)
Revision Date	08/08/2016

Risk Phrases In Full	
R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R36/37/38	Irritating to eyes, respiratory system and skin.
R36	Irritating to eyes.
R38	Irritating to skin.
R66	Repeated exposure may cause skin dryness or cracking.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.
Hazard Statements In Full	
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H335	May cause respiratory irritation.
EUH066	Repeated exposure may cause skin dryness or cracking.
H411	Toxic to aquatic life with long lasting effects.