

SAFETY DATA SHEET POLYMARINE HYPALON ADHESIVE

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name: Polymarine HYPALON Adhesive

Product Number:

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

Identified uses Adhesive.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier:

Polymarine Ltd. Chester House The Dingle

Colwyn Bay, Conwy

LL29 7SN United Kingdom

Tel: +44 (0)1492 583322 Fax: +44 (0)1492 531666 info@polymarine.com

1.4. Emergency telephone number

+44 01827 69662 (NOT 24HRS) **Emergency telephone**

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Flam. Liq. 2 - H225

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H336 Health hazards

Environmental hazards Aquatic Chronic 2 - H411

1999/45/EC)

Classification (67/548/EEC or Xi;R36/38. R43. F;R11. N;R51/53. R67.

Physicochemical The product is highly flammable. Vapours may form explosive mixtures with air. Vapours are

heavier than air and may travel along the floor and accumulate in the bottom of containers.

Vapours may be ignited by a spark, a hot surface or an ember.

2.2. Label elements

Pictogram







POLYMARINE HYPALON ADHESIVE

Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray. 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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

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

P313 Get medical advice/attention.

P501 Dispose of contents/container in accordance with national regulations.

Contains BUTANONE, CYCLOHEXANE, ACETONE, hydrocarbons, C6-C7,n-alkanes, isoalkanes,

cyclics, <5% n-hexane, ROSIN

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

BUTANONE 10-30%

CAS number: 78-93-3 EC number: 201-159-0 REACH registration number: 01-

2119457290-43

Classification Classification (67/548/EEC or 1999/45/EC)

Flam. Liq. 2 - H225 F;R11 Xi;R36 R66 R67

Eye Irrit. 2 - H319 STOT SE 3 - H336

CYCLOHEXANE 10-30%

CAS number: 110-82-7 EC number: 203-806-2 REACH registration number: 01-

2119463273-41-0000

M factor (Acute) = 1 M factor (Chronic) = 1

Classification Classification (67/548/EEC or 1999/45/EC)

Flam. Liq. 2 - H225 F;R11 Xn;R65 Xi;R38 R67 N;R50/53

Acute Tox. 4 - H312 Skin Irrit. 2 - H315 STOT SE 3 - H336

Asp. Tox. 1 - H304 Aquatic Acute 1 - H400

Aquatic Chronic 1 - H410

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ACETONE 10-30%

CAS number: 67-64-1 EC number: 200-662-2 REACH registration number: 01-

2119471330-49

Classification Classification (67/548/EEC or 1999/45/EC)

Flam. Liq. 2 - H225 Acute Tox. 4 - H312 Eye Irrit. 2 - H319 F;R11 Xi;R36 R66 R67

hydrocarbons, C6-C7,n-alkanes, isoalkanes, cyclics, <5% n-

10-30%

hexane

CAS number: — EC number: 921-024-6 REACH registration number: 01-

2119475514-35

Xn;R65. Xi;R38. F;R11. N;R51/53. R67.

Classification Classification (67/548/EEC or 1999/45/EC)

Flam. Liq. 2 - H225

STOT SE 3 - H336

Skin Irrit. 2 - H315 STOT SE 3 - H336

Asp. Tox. 1 - H304

STOT SE 3 - H336

Aquatic Chronic 2 - H411

ROSIN 1-5%

CAS number: 8050-09-7 EC number: 232-475-7 REACH registration number: 01-

2119480418-32-0036

Classification Classification (67/548/EEC or 1999/45/EC)

Skin Sens. 1 - H317 R43

HEXANE-norm <1%

CAS number: 110-54-3 EC number: 203-777-6 REACH registration number: 01-

2119480412-44

Classification Classification (67/548/EEC or 1999/45/EC)

Flam. Liq. 2 - H225 F;R11 Repr. Cat. 3;R62 Xn;R48/20,R65 Xi;R38 R67

Skin Irrit. 2 - H315

Repr. 2 - H361f

STOT SE 3 - H336

STOT RE 2 - H373 Asp. Tox. 1 - H304

Aquatic Chronic 2 - H411

N;R51/53

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

General information Get medical attention if any discomfort continues.

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Inhalation Remove affected person from source of contamination. Move affected person to fresh air and

keep warm and at rest in a position comfortable for breathing.

Ingestion Rinse mouth thoroughly with water. Get medical attention.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

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

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

Inhalation Vapours may cause headache, fatigue, dizziness and nausea.

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

Skin contact Prolonged skin contact may cause redness and irritation.

Eye contact May cause temporary eye irritation.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

Specific treatments Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire. Extinguish with alcohol-resistant

foam, carbon dioxide or dry powder.

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

Specific hazards The product is flammable. Heating may generate flammable vapours. Protection against

nuisance dust must be used when the airborne concentration exceeds 10 mg/m3. The product

is highly flammable.

Hazardous combustion

products

Does not decompose when used and stored as recommended.

5.3. Advice for firefighters

Protective actions during

firefighting

Control run-off water by containing and keeping it out of sewers and watercourses. Avoid

breathing fire gases or vapours. Keep up-wind to avoid fumes.

Special protective equipment

for firefighters

Wear chemical protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the

Environmental Agency or other appropriate regulatory body. Do not discharge into drains or

watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near

spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into

containers.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste

disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Static electricity and formation of sparks must

be prevented. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Keep container tightly closed. Keep only in the

original container.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

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

Occupational exposure limits

BUTANONE

Long-term exposure limit (8-hour TWA): WEL 200 ppm(Sk) 600 mg/m3(Sk) Short-term exposure limit (15-minute): WEL 300 ppm(Sk) 899 mg/m3(Sk)

CYCLOHEXANE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 350 mg/m³ Short-term exposure limit (15-minute): WEL 300 ppm 1050 mg/m³

ACETONE

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³ Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

HEXANE-norm

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m³

Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

BUTANONE (CAS: 78-93-3)

Ingredient comments WEL = Workplace Exposure Limits

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Biological limit values Short Term Value: 300ppm Long Term Value: 200ppm

CYCLOHEXANE (CAS: 110-82-7)

DNEL Consumer - Oral; Long term systemic effects: 59.4 mg/kg bw/day

> Consumer - Dermal; Long term systemic effects: 1186 mg/kg bw/day Workers - Dermal; Long term systemic effects: 2016 mg/kg bw/day

Consumer - Inhalation; Short term local effects: 412 mg/m³ Consumer - Inhalation; Short term systemic effects: 412 mg/m3 Workers - Inhalation; Short term local effects: 700 mg/m³ Workers - Inhalation; Short term systemic effects: 700 mg/m³ Consumer - Inhalation; Long term local effects: 206 mg/m³ Workers - Inhalation; Long term local effects: 700 mg/m³ Consumer - Inhalation; Long term systemic effects: 206 mg/m³ Workers - Inhalation; Long term systemic effects: 700 mg/m³

PNEC - Fresh water; 0.207 mg/l

- Sediment (Freshwater); 3.627 mg/kg

- STP; 3.24 mg/l - Soil; 2.99 mg/kg

ACETONE (CAS: 67-64-1)

Ingredient comments WEL = Workplace Exposure Limits

hydrocarbons, C6-C7,n-alkanes, isoalkanes, cyclics, <5% n-hexane

Ingredient comments WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment













Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves.

Frequent changes are recommended.

Other skin and body protection

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

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Wash contaminated clothing before reuse. Wash hands after handling. Eating, smoking and water fountains prohibited in immediate work area.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3.

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Environmental exposure

controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Coloured liquid.

Colour Various colours.

Odour Acetone.

Odour threshold Not available.

pH pH (concentrated solution): 7-8

Melting point Not available.

Initial boiling point and range 56°C @ 20

Flash point -22°C CC (Closed cup).

Evaporation rate Not determined.

Evaporation factor Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or

explosive limits

: 0.6%-13%

Other flammability Not available.

Vapour pressure Not available.

Vapour density Not available.

Relative density 0.86 @ 20°C

Bulk density Not available.

Solubility(ies) Insoluble in water.

Partition coefficient Not available.

Auto-ignition temperature 200°C

Decomposition Temperature Not available.

Viscosity Kinematic viscosity > 20.5 mm²/s.

Explosive properties Not available.

Explosive under the influence

of a flame

Not considered to be explosive.

Oxidising properties Not available.

Comments Information given is applicable to the product as supplied.

9.2. Other information

Other information No information required.

Refractive index Not available.

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Particle size Not available.

Molecular weight Not available.

Volatility Not available.

Saturation concentration Not available.

Critical temperature Not available.

Volatile organic compound This product contains a maximum VOC content of 700 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability No particular stability concerns. Stable at normal ambient temperatures and when used as

recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Not applicable. Not relevant.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon.

Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects No information available.

Other health effects There is no evidence that the product can cause cancer.

Acute toxicity - dermal

ATE dermal (mg/kg) 5,479.45

Serious eye damage/irritation

Serious eye damage/irritation Irritation of eyes is assumed.

Respiratory sensitisation

Respiratory sensitisation Not determined.

Skin sensitisation

Skin sensitisation Not determined.

Carcinogenicity

Carcinogenicity Data lacking.

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Target organ for

Not relevant.

carcinogenicity

Reproductive toxicity

Reproductive toxicity - fertility Not available.

Reproductive toxicity -

development

This substance has no evidence of toxicity to reproduction.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

General information No specific health hazards known.

Inhalation Vapour from this product may be hazardous by inhalation.

Ingestion May be harmful if swallowed.

Skin contact May be harmful in contact with skin.

Eye contact May cause blurred vision and serious eye damage.

Toxicological information on ingredients.

BUTANONE

Acute toxicity - oral

Acute toxicity oral (LD50

2,000.0

mg/kg)

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,000.0

mg/kg)

Species Rabbit

ATE dermal (mg/kg) 2,000.0

Acute toxicity - inhalation

Acute toxicity inhalation

20.0

(LC50 vapours mg/l)

Species Rat

CYCLOHEXANE

Acute toxicity - oral

Acute toxicity oral (LD50

5,000.0

mg/kg)

Species Rat

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LDso 2,000.0

mg/kg)

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Species Rabbit

ATE dermal (mg/kg) 2,000.0

hydrocarbons, C6-C7,n-alkanes, isoalkanes, cyclics, <5% n-hexane

Toxicological effects No information available.

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

5,840.0

Species Rat

Notes (oral LD₅₀) Not known. Data lacking.

ATE oral (mg/kg) 5,840.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,920.0

mg/kg)

Species Rat

Notes (dermal LD₅₀) Data lacking.

ATE dermal (mg/kg) 2,920.0

Acute toxicity - inhalation

Acute toxicity inhalation

(LC50 vapours mg/l)

25.2

Species Rat

ATE inhalation (vapours

mg/l)

25.2

Skin corrosion/irritation

Animal data Data lacking.

Serious eye damage/irritation

Serious eye

Data lacking.

damage/irritation

Aspiration hazard

Aspiration hazard Kinematic viscosity > 20.5 mm²/s.

Inhalation May cause respiratory system irritation.

Ingestion May cause stomach pain or vomiting.

Skin contact Irritating to skin.

Eye contact May cause severe eye irritation.

Acute and chronic health

hazards

Vapour from this product may be hazardous by inhalation.

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Route of entry Inhalation Skin absorption Ingestion. Skin and/or eye contact

Target organs No specific target organs known.

Medical symptoms Gas or vapour in high concentrations may irritate the respiratory system. Symptoms

following overexposure may include the following: Headache. Fatigue. Nausea,

vomiting.

Medical considerations No information available.

SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - fish Supplier's information.

LCo, hours: >1-10< mg/l, Fish

Acute toxicity - aquatic plants , hours: >1-10 mg/l, Algae

Ecological information on ingredients.

BUTANONE

Acute toxicity - fish LC₅₀, EC₅₀, IC₅₀, : 100 mg/l, Fish

Acute toxicity - aquatic

plants

 $LC_{50},\,EC_{50},\,IC_{50},\,$: 100 mg/l, Algae

CYCLOHEXANE

Acute aquatic toxicity

LE(C)₅₀ $0.1 < L(E)C50 \le 1$

M factor (Acute) 1

Acute toxicity - fish LC₀, 96 hours: 4.53 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic

invertebrates

ECo, 48 hours: 0.9 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

ICo, 72 hours: 3.4 mg/l, Algae

Acute toxicity -

microorganisms

EC₅o, 20 hours: 29 mg/l, Bacteria

Chronic aquatic toxicity

M factor (Chronic) 1

12.2. Persistence and degradability

12.3. Bioaccumulative potential

Partition coefficient Not available.

Ecological information on ingredients.

CYCLOHEXANE

Bioaccumulative potential BCF: 167,

12.4. Mobility in soil

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Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all

surfaces.

Ecological information on ingredients.

BUTANONE

Mobility The product contains volatile organic compounds (VOCs) which will evaporate

easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

Ecological information on ingredients.

BUTANONE

Results of PBT and vPvB This product does not contain any substances classified as PBT or vPvB. **assessment**

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

BUTANONE

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site

in accordance with the requirements of the local Waste Disposal Authority.

Disposal methodsDispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1133

UN No. (IMDG) 1133

UN No. (ICAO) 1133

14.2. UN proper shipping name

Proper shipping name

ADHESIVES (hydrocarbons, C6-C7,n-alkanes, isoalkanes, cyclics, <5% n-hexane)

(ADR/RID)

Proper shipping name

ADHESIVES (hydrocarbons, C6-C7,n-alkanes, isoalkanes, cyclics, <5% n-hexane)

(IMDG)

Proper shipping name (ICAO) ADHESIVES (hydrocarbons, C6-C7,n-alkanes, isoalkanes, cyclics, <5% n-hexane)

Proper shipping name (ADN) ADHESIVES (hydrocarbons, C6-C7,n-alkanes, isoalkanes, cyclics, <5% n-hexane)

14.3. Transport hazard class(es)

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ADR/RID class 3

ADR/RID subsidiary risk

ADR/RID label 3

IMDG class 3

IMDG subsidiary risk

ICAO class/division 3

ICAO subsidiary risk

Transport labels



14.4. Packing group

ICAO packing group

ADR/RID packing group II

IMDG packing group II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

Ш

33



14.6. Special precautions for user

EmS F-E, S-D

Emergency Action Code •3YE

Hazard Identification Number

(ADR/RID)

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

National regulations Health and Safety at Work etc. Act 1974 (as amended).

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as

amended).

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009

No. 716).

Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation Commission Directive 91/322/EEC of 29 May 1991 on establishing indicative limit values by

implementing Council Directive 80/1107/EEC on the protection of workers from the risks

related to exposure to chemical, physical and biological agents at work.

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) (as amended).

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date Compliance 22/10/2015

Revision 21

Risk phrases in full R11 Highly flammable.

R36 Irritating to eyes.

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through

inhalation.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

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

environment.

R62 Possible risk of impaired fertility.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full H225 Highly flammable liquid and vapour.

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.

H336 May cause drowsiness or dizziness. H361f Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

Store Between 5'c - 25'c

Contains SVHC NO