SAFETY DATA SHEET
CYCLO® SILICONE SPRAY

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 CYCLO® SILICONE SPRAY

Product No. C-33

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

Identified uses Silicone spray lubricates waterproofs inhibits rust and corrosion.

1.3. Details of the supplier of the safety data sheet

Supplier

Cyclo Industries Inc.
Regent House Business Centre
24-25 Nutford Place
Marble Arch
London
W1H 5YN
0797 6921836
E mail ehs@cyclo.com

1.4. Emergency telephone number

001 312 906 6194

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R38. F+;R12. N;R50/53. R67.

Human health

See section 11 for additional information on health hazards.

Environment

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

Physical and Chemical Hazards

Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures.

2.2. Label elements

Contains DISTILLATES (PETROLEUM), HYDROTREATED LIGHT
HEPTANE

Labelling


Irritant


Extremely flammable


Dangerous for the environment

Risk Phrases

R12	Extremely flammable.
R38	Irritating to skin.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67	Vapours may cause drowsiness and dizziness.

Safety Phrases

A1	Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
A2	Do not spray on a naked flame or any incandescent material.
S2	Keep out of the reach of children.
S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S23	Do not breathe vapour/spray.
S24	Avoid contact with skin.
S29	Do not empty into drains.
S37	Wear suitable gloves.
S51	Use only in well-ventilated areas.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT **30-60%**

CAS-No.: 64742-47-8 **EC No.: 265-149-8**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Asp. Tox. 1 - H304	Xn;R65

HEPTANE **10-30%**

CAS-No.: 142-82-5 **EC No.: 205-563-8**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
Skin Irrit. 2 - H315	Xn;R65
STOT SE 3 - H336	Xi;R38
Asp. Tox. 1 - H304	R67
Aquatic Acute 1 - H400	N;R50/53
Aquatic Chronic 1 - H410	

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

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

Inhalation

Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact

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

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

Inhalation.

Drowsiness, dizziness, disorientation, vertigo.

Ingestion

Nausea, vomiting.

Skin contact

Skin irritation.

Eye contact

Prolonged contact may cause redness and/or tearing.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use: Water spray, foam, dry powder or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Aerosol cans may explode in a fire. Vapours are heavier than air and may spread near ground to sources of ignition.

Specific hazards

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

5.3. Advice for firefighters

Special Fire Fighting Procedures

Containers close to fire should be removed immediately or cooled with water. Use water to keep fire exposed containers cool and disperse vapours. 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

Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Provide ventilation and confine spill. Do not allow runoff to sewer.

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.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide good ventilation. Avoid spilling, skin and eye contact. Avoid inhalation of vapours and spray mists. Keep away from heat, sparks and open flame.

7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Keep away from heat, sparks and open flame.

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
HEPTANE	WEL	500 ppm				

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment

Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. In case of inadequate ventilation use suitable respirator. Chemical respirator with organic vapour cartridge.

Hand protection

Wear protective gloves. Nitrile gloves are recommended.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Solubility	Insoluble in water
Initial boiling point and boiling range	-42ºC
Relative density	0.72 @ 20°C
Vapour density (air=1)	>1
Flash point	-104ºC
Flammability Limit - Lower(%)	0.7
Flammability Limit - Upper(%)	9.5
Comments	Information given concerns the concentrated solution.

9.2. Other information

Not known.

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

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid exposing aerosol containers to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances.

10.6. Hazardous decomposition products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

Vapours may cause drowsiness and dizziness. In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Ingestion

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

Skin contact

Irritating to skin.

Eye contact

Spray and vapour in the eyes may cause irritation and smarting.

Route of entry

Inhalation.

Toxicological information on ingredients.

CYCLO® SILICONE SPRAY

HEPTANE (CAS: 142-82-5)

Acute toxicity:

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rabbit

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

> 29.29 mg/L air Rat 4 hours

Estimated Value REACH dossier information

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Erythema\eschar score

Very slight erythema -barely perceptible (1).

Estimated Value REACH dossier information

Irritating.

Serious eye damage/irritation:

Not Irritating.

Respiratory or skin sensitisation:

Respiratory sensitisation

Mouse

Estimated Value REACH dossier information

Based on available data the classification criteria are not met.

Skin sensitisation

Guinea pig maximization test (GPMT):

Estimated Value REACH dossier information

Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Bacterial Reverse Mutation Test

REACH dossier information

Negative.

Based on available data the classification criteria are not met.

Carcinogenicity:

Carcinogenicity

Scientifically unjustified.

REACH dossier information

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Two-generation study: LOAEL 9000 ppm Inhalation. Rat F1

REACH dossier information

Reproductive Toxicity - Development

Maternal toxicity: NOAEL 900 ppm Inhalation. Mouse

Estimated Value REACH dossier information

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

NOAEC 12470 mg/m³ air (nominal) Inhalation.

REACH dossier information

Aspiration hazard:

Viscosity

Kinematic viscosity <= 20.5 mm2/s.

REACH dossier information

Acute toxicity:

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rabbit

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

> 5.28 mg/L air Rat 4 hours

REACH dossier information

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Erythema\eschar score

No erythema (0).

Oedema score

No oedema (0).

REACH dossier information

Not irritating.

Serious eye damage/irritation:

Not Irritating.

Respiratory or skin sensitisation:

Skin sensitisation

Buehler test: Guinea Pig

REACH dossier information

Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Gene Mutation:

REACH dossier information

Negative.

Genotoxicity - In Vivo

Chromosome aberration:

REACH dossier information

Negative.

Carcinogenicity:

Carcinogenicity

LOAEL 250 mg/kg Dermal Mouse

REACH dossier information

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Fertility: NOAEL 750 mg/kg/day Oral Rat P

REACH dossier information

Reproductive Toxicity - Development

Developmental toxicity: NOAEC 364 ppm Inhalation. Rat

REACH dossier information

Specific target organ toxicity - single exposure:

STOT - Single exposure

Inconclusive data.

REACH dossier information

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

NOAEL 750 mg/kg Oral

REACH dossier information

Aspiration hazard:

Viscosity

Kinematic viscosity <= 20.5 mm2/s.

Estimated Value REACH dossier information

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

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

12.1. Toxicity

Acute Fish Toxicity

Very toxic to aquatic organisms.

Ecological information on ingredients.

HEPTANE (CAS: 142-82-5)

Acute Toxicity - Fish

LL50 96 hours 5.738 mg/l Onchorhynchus mykiss (Rainbow trout)

Estimated Value REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 1.5 mg/l Daphnia magna

REACH dossier information

Acute Toxicity - Aquatic Plants

EL50 72 hours 4.338 mg/l Selenastrum capricornutum

Estimated Value REACH dossier information

NOELR 72 hours 0.97 mg/l Selenastrum capricornutum

Estimated Value REACH dossier information

EL50 48 hours 22.6 mg/l Tetrahymena pyriformis

Estimated Value REACH dossier information

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (CAS: 64742-47-8)

Acute Toxicity - Fish

LL50 96 hours ~ 18 mg/l Onchorhynchus mykiss (Rainbow trout)

Estimated Value REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EL50 48 hours 1.4 mg/l Daphnia magna

Estimated Value REACH dossier information

Acute Toxicity - Aquatic Plants

EL50 72 hours ~ 2 mg/l Freshwater algae

Estimated Value REACH dossier information

Acute Toxicity - Microorganisms

NOEL 72 hours 1.641 mg/l Tetrahymena pyriformis

Estimated Value REACH dossier information

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

Ecological information on ingredients.

HEPTANE (CAS: 142-82-5)

Degradability

The product is biodegradable.

Phototransformation

Air. Half-life: 4.47 days

Estimated Value REACH dossier information

Stability (Hydrolysis)

Scientifically unjustified.

REACH dossier information

Biodegradation

Soil Degradation (70%) 5 days

Estimated Value REACH dossier information

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (CAS: 64742-47-8)

Degradability

The product is biodegradable.

Stability (Hydrolysis)

Scientifically unjustified.

REACH dossier information

Biodegradation

Water Degradation (61%) 28 days

Estimated Value REACH dossier information

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Ecological information on ingredients.

HEPTANE (CAS: 142-82-5)

Bioaccumulation factor

BCF 552

Estimated Value REACH dossier information

Partition coefficient

log Pow 4.5

REACH dossier information

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (CAS: 64742-47-8)

Bioaccumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Bioaccumulation factor

Highly insoluble in water.

REACH dossier information

Partition coefficient

Highly insoluble in water.

12.4. Mobility in soil

Mobility:

The product is insoluble in water.

Ecological information on ingredients.

HEPTANE (CAS: 142-82-5)

Mobility:

The product has poor water-solubility.

Adsorption/Desorption Coefficient

log Koc 2.38

Estimated Value REACH dossier information

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (CAS: 64742-47-8)

Mobility:

The product has poor water-solubility.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.

HEPTANE (CAS: 142-82-5)

Not Classified as PBT/vPvB by current EU criteria.

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (CAS: 64742-47-8)

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

Ecological information on ingredients.

HEPTANE (CAS: 142-82-5)

None known.

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (CAS: 64742-47-8)

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Make sure containers are empty before discarding (explosion risk). Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

14.2. UN proper shipping name

Proper Shipping Name	AEROSOLS (HEPTANE)

14.3. Transport hazard class(es)

ADR/RID/ADN Class	2.1
ADR/RID/ADN Class	Class 2: Gases
ADR Label No.	2.1
IMDG Class	2.1

ICAO Class/Division 2.1

Transport Labels

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

14.6. Special precautions for user

EMS F-D, S-U

Tunnel Restriction Code (D)

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

No information required. Not relevant

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 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.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date June 2012

Revision 2

Supersedes date May 2009

Date May 2009

CYCLO® SILICONE SPRAY

Risk Phrases In Full

R12	Extremely flammable.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R38	Irritating to skin.
R67	Vapours may cause drowsiness and dizziness.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H315	Causes skin irritation.
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.