



SAFETY DATA SHEET
CYCLO® BREAK- AWAY® FAST PENETRATING OIL

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® BREAK- AWAY® FAST PENETRATING OIL
Product No. C10

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

Identified uses Penetrating oil lubricates inhibits rust and corrosion.

1.3. Details of the supplier of the safety data sheet

Supplier Tri Continental
Streliska 150/A
2000 Maribor,
Slovenia
011 386 2 3200100
E mail Address 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 (EC 1272/2008)

Physical and Chemical Hazards	Flam. Aerosol 1 - H222+H229
Human health	Not classified.
Environment	Not classified.

Classification (1999/45/EEC)

F+;R12.

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

Human health

See section 11 for additional information on health hazards.

Environment

The product is not expected to be hazardous to the 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

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



CYCLO® BREAK- AWAY® FAST PENETRATING OIL

Signal Word	Danger	
Hazard Statements	H222+H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
Precautionary Statements	P102	Keep out of reach of children.
	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P211	Do not spray on an open flame or other ignition source.
	P251	Pressurized container: Do not pierce or burn, even after use.
	P410+412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
	P501	Dispose of contents/container in accordance with international regulations.

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 HEAVY NAPHTHENIC		50-70%
CAS-No.: 64742-52-5	EC No.: 265-155-0	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.	
PETROLEUM GASES, LIQUEFIED, SWEETENED		20-30%
CAS-No.: 68476-86-8	EC No.: 270-705-8	
Classification (EC 1272/2008) Flam. Liq. 1 - H224	Classification (67/548/EEC) F+;R12.	
CYCLOHEXANONE		1-5%
CAS-No.: 108-94-1	EC No.: 203-631-1	
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H332	Classification (67/548/EEC) R10 Xn;R20	

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

Composition Comments

Mineral Oil, petroleum distillates, hydrotreated heavy naphthenic, contains <3%DMSO extract as measured by IP346 Determination of Polycyclic Aromatics. Liquefied petroleum gas, sweetened, contains <0.1% w/w 1, 3-butadiene.

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.

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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 any discomfort continues.

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

General information

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

Inhalation

Vapours may cause drowsiness and dizziness.

Ingestion

May cause stomach pain or vomiting.

Skin contact

Prolonged contact may cause redness, irritation and dry skin.

Eye contact

Prolonged contact may cause redness and/or tearing.

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

Fire can be extinguished using: Water spray, foam, dry powder or carbon dioxide. 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

Unusual Fire & Explosion Hazards

Extremely flammable. 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 (CO₂). Nitrous gases (NO_x). Sulphurous gases (SO_x).

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

Leave danger zone immediately. 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. To prevent release, place container with damaged side up.

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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. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

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 inhalation of vapours and spray mists. Keep away from heat, sparks and open flame. Protect against direct sunlight.

7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Protect from freezing and direct sunlight. Do not store near heat sources or expose to high temperatures.

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
CYCLOHEXANONE	WEL	10 ppm	41 mg/m ³	20 ppm	82 mg/m ³	Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

CYCLOHEXANONE (CAS: 108-94-1)

Biological Limit Values

2 mmol cyclohexanol/mol creatinine in urine

Post Shift

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

Use suitable protective gloves if risk of skin contact. Use protective gloves made of: Nitrile. or Viton rubber (fluor rubber).

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.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Amber. to Brown.
Odour	Solvent.
Solubility	Slightly soluble in water.
Initial boiling point and boiling range (°C)	-94°C
Melting point (°C)	Data lacking.
Relative density	0.820
Bulk Density	Not available.
Vapour density (air=1)	Not available.
Vapour pressure	Not known.
Evaporation rate	Not available.
Evaporation Factor	Not available.
pH-Value, Conc. Solution	Not available.
pH-Value, Diluted Solution	Not available.
Viscosity	Not available.
Solubility Value (G/100G H₂O@20°C)	Not available.
Decomposition temperature (°C)	Not available.
Odour Threshold, Lower	Not available.
Odour Threshold, Upper	Not available.
Flash point (°C)	- 96.1°C TCC (Tag closed cup).
Auto Ignition Temperature (°C)	Not available.
Flammability Limit - Lower(%)	0.7
Flammability Limit - Upper(%)	9.5
Partition Coefficient (N-Octanol/Water)	Not available.
Oxidising properties	Does not meet the criteria for oxidising.
Comments	Information given concerns the concentrated solution.

9.2. Other information

Volatile Organic Compound (VOC) 26.88%

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

CYCLO® BREAK- AWAY® FAST PENETRATING OIL

Oxidising materials.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not applicable.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids.

10.6. Hazardous decomposition products

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x). Sulphurous gases (SO_x).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

Acute Toxicity (Inhalation LC50)

> 4600 ppm

Aspiration hazard:

Based on available data the classification criteria are not met.

General information

This product has low toxicity. Only large volumes may have adverse impact on human health.

Inhalation

May cause irritation to the respiratory system.

Ingestion

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

Skin contact

Liquid may irritate skin.

Eye contact

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

Health Warnings

No specific health warnings noted.

Route of entry

Inhalation.

Target Organs

No specific target organs noted

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Medical Symptoms

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

Medical Considerations

No information about adverse effects due to exposure.

Toxicological information on ingredients.

CYCLO® BREAK- AWAY® FAST PENETRATING OIL
CYCLOHEXANONE (CAS: 108-94-1)

Acute toxicity:**Acute Toxicity (Oral LD50)**

1890 mg/kg bw/day Rat
REACH dossier information
Harmful if swallowed.

Acute Toxicity (Dermal LD50)

> 794 mg/kg bw/day Rabbit
REACH dossier information

Acute Toxicity (Inhalation LC50)

> 6.2 mg/L air Rat
REACH dossier information

Respiratory or skin sensitisation:**Skin sensitisation**

Guinea pig maximization test (GPMT):
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 13000 ppm Oral Mouse
REACH dossier information

Reproductive Toxicity:**Reproductive Toxicity - Fertility**

Two-generation study: NOAEL 1000 ppm Inhalation. Rat
REACH dossier information

Reproductive Toxicity - Development

Teratogenicity: NOAEL 500 mg/kg/day Oral Rabbit
REACH dossier information

Specific target organ toxicity - repeated exposure:**STOT - Repeated exposure**

NOAEL 143 mg/kg Oral Rat
REACH dossier information

Aspiration hazard:**Viscosity**

Kinematic viscosity \leq 20.5 mm²/s.
Estimated Value REACH dossier information
Conclusive data but not sufficient for classification.

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SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Acute Fish Toxicity

Not considered toxic to fish.

Ecological information on ingredients.

CYCLOHEXANONE (CAS: 108-94-1)

Acute Toxicity - Fish

LC50 96 hours > 527 mg/l Pimephales promelas (Fat-head Minnow)

REACH dossier information

Acute Toxicity - Aquatic Invertebrates

24 hours 820 mg/l Daphnia magna

REACH dossier information

Acute Toxicity - Aquatic Plants

EC50 72 hours 32.9 mg/l Freshwater algae

REACH dossier information

Acute Toxicity - Microorganisms

EC50 30 min > 1000 mg/l Activated sludge

REACH dossier information

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

Ecological information on ingredients.

CYCLOHEXANONE (CAS: 108-94-1)

Degradability

The product is biodegradable.

Phototransformation

Air. DT50 ~ 1.3 days

Estimated Value REACH dossier information

Stability (Hydrolysis)

Scientifically unjustified.

REACH dossier information

Biodegradation

Water and Sediment Degradation (90%) 28 days

REACH dossier information

The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not available.

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Ecological information on ingredients.

CYCLOHEXANONE (CAS: 108-94-1)

Bioaccumulative potential

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

Bioaccumulation factor

Scientifically unjustified.

REACH dossier information

Partition coefficient

log Pow 0.86

12.4. Mobility in soil

Mobility:

The product is partly soluble in water. May spread in the aquatic environment.

Ecological information on ingredients.

CYCLOHEXANONE (CAS: 108-94-1)

Mobility:

The product has poor water-solubility.

Adsorption/Desorption Coefficient

Soil log Koc 1.18

REACH dossier information

Henry's Law Constant

1.21 Pa m³/mol 25°C

REACH dossier information

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.

CYCLOHEXANONE (CAS: 108-94-1)

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

Ecological information on ingredients.

CYCLOHEXANONE (CAS: 108-94-1)

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

Recover and reclaim or recycle, if practical. 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

CYCLO® BREAK- AWAY® FAST PENETRATING OIL**14.2. UN proper shipping name**

Proper Shipping Name AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class 2
 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**

ADR/RID/ADN Packing group N/A
 IMDG Packing group N/A
 ICAO Packing group N/A

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
 No.

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****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. 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.

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SECTION 16: OTHER INFORMATION

Revision Date	09-2013
Revision	3
Supersedes date	01/11/2010
Date	01/11/2010

Risk Phrases In Full

R12	Extremely flammable.
R10	Flammable.
R20	Harmful by inhalation.
NC	Not classified.

Hazard Statements In Full

H222+H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
H224	Extremely flammable liquid and vapour.
H226	Flammable liquid and vapour.
H332	Harmful if inhaled.

Disclaimer

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