



SAFETY DATA SHEET

COLUMBUS THERM 46

(This SDS complies with EU Regulation 878/2020)

SECTION 1	IDENTIFICATION OF THE MIXTURE AND THE COMPANY
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1.1 PRODUCT IDENTIFIER

Product name: COLUMBUS THERM 46
Product description: Mineral base oils and additives
Synonyms: n.a.
CAS number : n.d EC
number : n.d INDEX
number : n.d REACH
Registration number : n.d
Chemical formula : n.d
Molecule weight : n.d
UFI: n.d

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE AND RECOMMENDED USES

Intended use: Lubricants expressly formulated with severely refined bases and an additive suitable for uses involving heat transmission and heat dissipation.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier:
COLUMBIA SOCIETÀ ITALIANA LUBRIFICANTI E AFFINI s.r.l.
Via Burba, 8
16163 GENOA (IT)
Tel. 010 710033

1.3 COMPETENT TECHNICIAN RESPONSIBLE FOR SAFETY DATA SHEET

sicurezza@columbiamotoroil.com

1.4 TELEPHONE FOR EMERGENCIES:

010 710033

SECTION 2	HAZARD IDENTIFICATION
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2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

The mixture is not classified as dangerous according to Regulation (EC) No.1272/2008 (CLP/GHS) as amended. The product does not present a hazard to man or the environment.

2.2 LABEL ELEMENTS

Symbols: None
Indications of danger: None
Precautionary statements: None
Special provisions: None

2.3 OTHER RISKS

Chemical-physical hazards: None
Health hazards: None



Environmental hazards: No significant hazards. The product does not meet the PBT or vPvB criteria according to Annex XIII of Regulation (EC) No 1907/2006.

The mixture has no endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Notes: No other hazards

SECTION 3	COMPOSITION / INFORMATION ON COMPONENTS
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3.1 SUBSTANCES

Not applicable. This material is regulated as a mixture.

3.2 MIXTURES

Composition Mix

Mixture of paraffinic mineral oils of which the DMSO extract < 3% w/w (according to IP method 346/92), complies with Note L of Directive 97/56/EC Annex I, therefore the classification r45 (carcinogenic) is not applicable.

The mixture does not contain any other hazardous substances in a concentration requiring mention (Regulation (EC) No 1907/2006) as amended.

SECTION 4	FIRST AID MEASURES
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4.1 DESCRIPTION OF FIRST AID MEASURES

Inhalation:

In the event of exposure to high concentrations of vapours and/or mists, remove the person from the contaminated air and transport them to a well-ventilated place. Seek medical attention if necessary.

Skin contact:

Wash contact areas with soap and water. If product is injected into or under the skin, or anywhere on the body, regardless of the appearance or size of the wound, have the patient seen by a physician immediately as a surgical emergency. Although initial symptoms from high-pressure injection may be minimal or absent, early surgical treatment within a few hours can significantly reduce the final extent of the injury.

Eye contact:

Rinse with copious amounts of water while holding the eyelids open. In case of irritation, seek medical attention.

Ingestion:

Do not induce vomiting to avoid the risk of aspiration through the respiratory tract. Seek immediate medical attention.

4.2 MAIN SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhalation: may cause irritation of the respiratory tract caused by excessive exposure to fumes, mists or vapours.

Skin contact: may cause skin irritation with repeated and prolonged exposure. Contact with hot product can cause severe thermal burns.

Eye contact: may cause slight eye irritation. Contact with hot product may cause severe thermal burns.

Ingestion: few or no symptoms expected. Eventually, nausea and diarrhoea may occur.



4.3 INDICATIONS OF ANY NEED TO CONSULT A DOCTOR AND SPECIAL TREATMENT

Treatments:

Seek medical advice immediately after contact with the eyes, for persistent skin irritation and after ingestion and in case of severe burns.
If breathing is difficult, consult a doctor immediately. Induce vomiting only on doctor's orders.

SECTION 5

FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Suitable extinguishing media:

Use extinguishing media for class B fires: use water mist, foam, dry chemical powder, carbon dioxide (CO₂) to extinguish the fire, sand, earth, water spray.

Unsuitable extinguishing media: Avoid the use of water jets. Use water jets only to cool container surfaces exposed to fire.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Avoid breathing in combustion fumes as unburned hydrocarbons and other potentially dangerous by-products may be formed after a fire.

Do not inhale the gases produced by the explosion and combustion.

5.3 RECOMMENDATION FOR FIREFIGHTERS

Wear personal protective clothing, complete with self-breathing apparatus (Refer to Ministerial Decree 02/05/2001)

Note: Cool containers not involved in the fire but exposed to the heat from the fire with water, to prevent possible explosion and spread of the fire.

Use appropriate respiratory equipment.

Collect contaminated water used to extinguish the fire separately. Do not discharge it into the sewage system. If safe to do so, move undamaged containers from the immediate danger area.

SECTION 6

MEASURES IN CASE OF ACCIDENTAL RELEASE

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND PROCEDURES IN CASE OF EMERGENCY

Avoid contact with skin and eyes by wearing personal protective clothing.

If large quantities are spilled, particularly in a confined environment, avoid breathing in the vapours by ventilating the room or wearing respiratory protective equipment.

Move people to a safe place.

6.2 ENVIRONMENTAL PRECAUTIONS

Avoid dispersal and run-off into soil, sewage and surface water. If necessary inform the competent local authorities (fire brigade, police).

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND REMEDIATION

Dike in case of spillage of large quantities of product. Contain spillages of small quantities of product with earth, sand or other inert absorbent material. Transfer to suitable impermeable and hydrocarbon-resistant containers.

Dispose of in accordance with current regulations.

6.4 REFERENCE TO OTHER SECTIONS

See also paragraphs 8 and 13

SECTION 7

HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid direct contact with the product, open the container in a suitably ventilated/ventilated room, avoid breathing any vapours, keep containers closed when not in use, use suitable containers for decanting. Do not eat or drink in working areas. Please also refer to section 8 for recommended protective equipment.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep the product in its original containers, store them in an environment and under conditions that ensure control and containment of any leakage. Store containers in a cool place, away from any source of heat and direct exposure to sunlight. Avoid the build-up of electrostatic charges. Keep containers tightly closed and in an upright position. Ensure adequate room ventilation. Storage temperature: *Ambient*

7.3 PARTICULAR END USES

No particular use.

SECTION 8

EXPOSURE CONTROL / INDIVIDUAL PROTECTION

8.1 CONTROL PARAMETERS

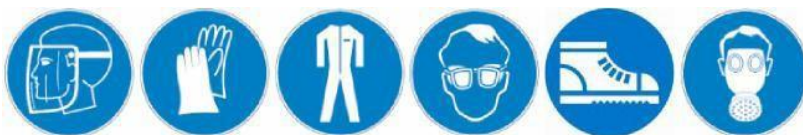
Exposure limit values (mixture components - ACGIH 2021).

Notes: Standard/exposure limits for materials may be encountered when handling this product: In the presence of mists/aerosols, the following limits are recommended: 5 mg/m³ - TLV ACGIH, 10 mg/m³ STEL ACGIH.

Monitoring procedures:

Refer to Legislative Decree 81/2008 as amended.

8.2 PERSONAL PROTECTION



8.2.1 Eye protection

For further information please refer to standard UNI-EN 166

Not required for normal use. Operate according to good working practices in any case.

8.2.2 Individual protection measures, such as personal protective equipment

Eye/face protection

Use protective goggles where contact with the product is possible (UNI EN 166). provide eye wash fountains.

8.2.3 Hand protection

Wear working gloves (e.g. made of neoprene, nitrile or PVC), preferably fleece-lined, resistant to mineral oils or solvents. Gloves should be replaced at the first signs of wear. Wear gloves after adequate hand cleaning.

In the case of non-prolonged contact, the use of barrier creams can be a useful means of protection.

The choice of protective gloves also depends on the conditions of use and must take into account the manufacturer's instructions. For more information refer to the UNI-EN 374 standard.

Not required for normal use.



8.2.4 Skin protection

Use overalls and an apron made of suitable material; change contaminated clothing immediately and wash it thoroughly before use. For further information refer to EN 465, 466, 467.

8.2.5 Respiratory protection

Not required under normal conditions of use. If the operating methods and other means of limiting worker exposure are inadequate, other means of protecting the respiratory tract are required in order to comply with exposure limits: masks with cartridges for organic vapours and for dust/mists. For more information refer to EN 140 and 141.

8.2.6 Appropriate hygiene measures

Good personal hygiene and work clothing should be maintained. For more information refer to the UNI-EN 465/466/467 standards.

8.2.7 Thermal risks

During operations involving hot material, use heat-resistant clothing (with trousers over boots and sleeves over the cuff of gloves), heavy heat-resistant and non-slip boots (e.g. leather) (ref. EN 943-13034-14605).

8.2.8 Environmental exposure controls

Take all necessary technical precautions to avoid spreading the product in the surrounding environment. Operate only in an equipped area, provided with containment systems and emergency response equipment (See point 6). Refer to the regulations in force on atmospheric pollution, soil and water pollution (Legislative Decree 03/04/2006, no. 152 and subsequent amendments and additions).

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON PHYSICAL AND CHEMICAL PROPERTIES

9.1.1 General Information

ISO Gradation: 46

Appearance and colour: Clear, amber-coloured liquid

Smell: Characteristic

Odour threshold: N.D.

Relative density (at 15 C°): 0.860

Flash point [Method]: >218 C° [ASTM D-92].

Solubility in water: Not soluble

Viscosity: 46.0 Cst. at 40 C° | - Cst. at 100 C°

Oxidising properties: See section Hazard Identification.

Auto-ignition temperature: N.D .

Vapour density (air = 1): N.A.

pH: N.A.

Evaporation rate (n-butyl acetate= 1): N/A.

9.1.2 Other information

Freezing point: N.D.

Melting point: N.A.

Pour point: -27 °C.



SECTION 10

STABILITY AND RESPONSIVENESS

10.1 REACTIVITY

Avoid contact with strong acids and bases and oxidising agents.

10.2 CHEMICAL STABILITY

Stable product under normal conditions.

Stable under normal conditions.

10.3 POSSIBILITY OF DANGEROUS REACTIONS

None.

10.4 CONDITIONS TO BE AVOIDED

High temperatures.

10.5 INCOMPATIBLE MATERIALS

None in particular.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None.

SECTION 11

TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

11.1.1 Toxicological information concerning the mixture

May cause slight irritation.

General warning: high-pressure injection of product into the skin may lead to local necrosis if the product is not removed surgically.

Frequent and prolonged contact can degrease and irritate the skin, even causing dermatitis.

Prolonged exposure to the product may cause drowsiness and dizziness.

Prolonged exposure to product vapours or mists may cause irritation of the respiratory tract.

11.1.2 Toxicological information concerning effects:

By inhalation: Minimally toxic. Based on test data for materials of similar structure. Toxicity (Rat): LC 50 > 5000 mg/m³. Irritation of the respiratory tract is of negligible danger at room temperature or normal handling.

Ingestion: Minimally toxic. Based on test data for materials of similar structure. Toxicity (Rat): LD 50 > 5000 mg/kg. **After skin contact:** Minimally toxic. Based on test data for materials of similar structure. Toxicity (Rabbit): LD 50 > 5000 mg/kg. Irritation (Rabbit): Available data.

On contact with eyes: May cause slight short-term discomfort to the eyes. Based on test data for materials of similar structure.

Irritation (Rabbit): Available data.

Unless otherwise specified, the data required by Regulation No. 453/2010 EC below are not applicable:

Acute toxicity.

Skin corrosion/irritation.

Serious eye damage/serious eye irritation. Respiratory sensitisation.

Germ cell mutagenicity. Carcinogenicity.

Reproductive toxicity.

Specific target organ toxicity (STOT) - single exposure. Specific target organ toxicity (STOT) - repeated exposure



SECTION 12

ECOLOGICAL INFORMATION

12.1 TOXICITY

Use according to good working practices, avoiding dispersal in the environment.

12.2 PERSISTENCE AND DEGRADABILITY

Not applicable.

12.3 BIOACCUMULATION POTENTIAL

Not applicable.

12.4 MOBILITY IN THE SOIL

Not applicable.

12.5 RESULTS OF THE PBT AND vPvB EVALUATION

PBT substances: none - vPvB substances: none.

12.6 OTHER ADVERSE EFFECTS

None

SECTION 13

DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

This product must not be discharged into drains, sewers, watercourses and rivers. Follow applicable laws. Dispose of used products (and emulsions) and empty containers by handing them over to authorised companies, in accordance with the provisions of Presidential Decree no. 23/04/2002 (Compulsory Consortium of Used Oils) and part IV of the Environmental Code (Legislative Decree no. 152 of 03 April 2006) and s.m.i. **For further information on disposal, please contact: "CONSORZIO OBLIGATORIO DEGLI OLI USATI" - Toll-free number: 800 863048**

13.2 EUROPEAN WASTE CATALOGUE CODE: 13 02 06 (Dir. 09/04/2002)

The indicated code is only a general indication, assigned according to its composition and intended use.

The user is ultimately responsible for assigning the most appropriate code, based on the actual use of the product, assessing any contamination or alteration suffered during the waste generation process.

13.3 EUROPEAN CATALOGUE CODE FOR METALLIC WASTE PACKAGING: 15 01 04 (Dir. 09/04/2002)

13.4 EUROPEAN PLASTIC WASTE CATALOGUE CODE: 15 01 02 (Dir. 09/04/2002)



SECTION 14

TRANSPORT INFORMATION

14.1 UN NUMBER

Not dangerous goods within the meaning of transport regulations.

14.1 UN DISPATCH NAME

N.A.

14.2 TRANSPORT-RELATED HAZARD CLASSES

N.A.

14.3 PACKING GROUP

N.A.

14.4 DANGERS TO THE ENVIRONMENT

N.A.

14.5 SPECIAL PRECAUTIONS FOR USERS

N.A.

14.6 TRANSPORT OF BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

N.A.

SECTION 15

REGULATORY INFORMATION

15.1 APPLICABLE REFERENCE LEGISLATION (NATIONAL LAWS AND REGULATIONS)

D. Legislative Decree No. 81 of 09/04/2008: Implementation of Article 1 of Law No. 123 of 3 August 2007 on the protection of health and safety in the workplace.

D. Legislative Decree 25/2002: Protection of workers against the risks of chemical agents at work.

D. Legislative Decree No. 65 of 14 March 2003: Transposition of Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 and of Directive 2001/60/EC of the Commission of 7 August 2001 relating to the classification, packaging and labelling of dangerous preparations.

Directive 2006 /8/EC of 23 January 2006 amending, for the purposes of their adaptation to technical progress, Annexes II, III and V to Directive 1999/45/EC of the European Parliament and of the Council concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations. **(EC) No. 1907/2006** REACH Regulation.

(EC) No 453/2010 Annex

SECTION 16

OTHER INFORMATION

N.D= Not determined, N.A.= not applicable

This sheet has been revised in all its sections in accordance with EU Regulation 878/2020.

16.1 CONFORMITY

The data and information given in this safety data sheet comply with current legislation. However, the user is recommended to



check and comply with specific national, regional and local regulations concerning hazardous activities and environmental protection, which are not the subject of this document.

16.2 PURPOSE

The information in this safety data sheet is provided for the purpose of health and safety protection in the workplace. work. The information contained herein relates only to the product indicated and may not apply if the product is used in combination with others or in processing.

16.3 COMPILATION DATE/REVISION DATE

Product name: COLUMBUS THERM 46

Compilation date: June 2023

Revision date: 03 October 2024

16.4 OBSERVATIONS

Do not use the product for uses other than those indicated in the sheet under 1.2. If used for other purposes, the user may be exposed to unforeseeable hazards. If the information given here indicates a potential hazard or a dangerous component, appropriate instructions must be given to employees and users and all necessary precautions must be taken.

Our information contained herein is based on our knowledge at the date stated above and refers to the product indicated. This sheet cancels and replaces any previous edition.

