SAFETY DATA SHEET

Issuing Date: 04-24-2015 **Revision Date:** 04-29-2015 **Version** 1

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

1.1.
Product identifier

Product Code(s): 73014683-M
Product Name CINDOLUBE 4683
Product Registration number
Denmark -
Norway -
Sweden -
EC # Not Applicable
Pure substance/preparation

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

Recommended use Metalworking fluid, Forming, Drawing

Uses advised against Any other purpose.

1.3. Details of the supplier of the safety data sheet

Manufacturer, Importer, Supplier

Houghton plc
Beacon Road
Trafford Park
Manchester
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E-mail: MSDS@uk.houghtonglobal.com

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Houghton Kimya San. A.Ş
Kosuyolu Mah
Asma Dall Sok
No: 1434718 Kadıköy
İstanbul
Türkiye
Phone Number: +90 216 325 15 15

1.4. Emergency telephone number

3E Company: (+)1 760 476 3961 (Code 333938)

Austria	Notfall-Telefonnummer +43 (0) 1 406 4343
Bulgaria	Телефон за спешни случаи +359 2 9154 409
Switzerland	145; +41 (0) 44 254 51 51
Czech Republic	Telefonní číslo pro naléhavé situace +420 224 919 293
Denmark	Ring til Giftlinjen på +45 82 12 12 12
Finland	Hätäpuhelinnumero +358 09 471 977
France	Numéro d'appel d'urgence +33 (0)1 45 42 5959
Hungary	Díjmentesen hívható zöld szám +36 80 20 11 99
Ireland	Emergency telephone number +353 01 809 2166
Netherlands	Telefoonnummer voor +31 30 274 88 88
Norway	Nødnummer +47 22 59 13 00
Poland	112
Portugal	Número de telefone de emergência +351 808 250 143
Romania	Număr de telefon care poate fi apelat în caz de urgenţă +021 318 36 06 (08:00-15:00)
Spain	Número de teléfono de emergencia +34 91 562 0420
Sweden	Telefonnummer för nödsituationer +46 08 33 12 31 (09:00-17:00)
Turkey	(+)1 760 476 3959 (Code 333938)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label Elements

Hazard Statements
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)
P273 - Avoid release to the environment
P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards
No information available.

• 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
• 18.7 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
• 18.7 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
• 18.7 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
• 18.7 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

SECTION 3: Composition/information on ingredients

3.1. Substances / 3.2. Mixtures

This product is a mixture. Health hazard information is based on its ingredients

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)	REACH Registration Number
Highly refined base oil (Viscosity >20.5 cSt @40°C)	-	-	50% - 100%	**	-
2,6-Di-tert-butyl-p-cresol	204-881-4	128-37-0	0% - 1%	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119565113-46-xxxx 01-2119480433-40-xxxx 01-2119555270-46-xxxx

Additional information
Product containing mineral oil with less than 3% DMSO extract as measured by IP 346 See Section 15 for additional information on base oils.

** Substances for which there are Community workplace exposure limits

Full text of H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first-aid measures

General advice If symptoms persist, call a physician.

Inhalation Move to fresh air.

Skin contact Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

Ingestion Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice.

Protection of First-aiders Use personal protective equipment.

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

Main Symptoms None

4.3. Indication of immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment:, Use CO2, dry chemical, or foam, Water spray or fog, Cool containers / tanks with water spray

Extinguishing media which shall not be used for safety reasons
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Special Hazard
In the event of fire and/or explosion do not breathe fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). This material creates a fire hazard because it floats on water. Thermal decomposition can lead to release of irritating gases and vapors. Water runoff can cause environmental damage.

Hazardous Decomposition Products
Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide

5.3. Advice for firefighters

Special protective equipment for fire-fighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Ensure adequate ventilation.

Advice for non-emergency personnel Material can create slippery conditions.

Advice for emergency responders For personal protection see section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

After cleaning, flush away traces with water.

6.4. Reference to other sections

See Section 8/12/13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Keep away from open flames, hot surfaces and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

Recommended Shelf Life
No information available.

Incompatible Materials
Strong oxidizing agents, Strong acids, Strong bases

7.3. Specific end uses

Specific use(s) Metalworking fluid, Forming, Drawing

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	European Union	United Kingdom	France	Spain
Highly refined base oil (Viscosity >20.5 cSt @40°C)				VLA-EC: 10 mg/m³ VLA-ED: 5 mg/m³
2,6-Di-tert-butyl-p-cresol		STEL: 30 mg/m³ TWA: 10 mg/m³	VME: 10 mg/m³	

Chemical Name	Germany	Italy	Portugal	The Netherlands
2,6-Di-tert-butyl-p-cresol	MAK: 20 mg/m³ Ceiling / Peak: 40 mg/m³ Skin		TWA: 2 mg/m³	

Chemical Name	Austria	Switzerland	Poland	Ireland
Highly refined base oil (Viscosity >20.5 cSt @40°C)				STEL: 10 mg/m³ TWA: 5 mg/m³ (Mist)
2,6-Di-tert-butyl-p-cresol	MAK: 10 mg/m³	MAK: 10 mg/m³		TWA: 10 mg/m³

Chemical Name	Finland	Denmark	Norway	Sweden
Highly refined base oil (Viscosity >20.5 cSt @40°C)	TWA: 5mg/m³ (Öljysumu)	TWA: 1 mg/m³ (Olietåge)	TWA: 1 mg/m³ (Oljetåke)	LLV: 1 mg/m³ STV: 3 mg/m³ (Oljedimma)
2,6-Di-tert-butyl-p-cresol	TWA: 10 mg/m³ STEL: 20 mg/m³	TWA: 10 mg/m³		

Chemical Name	Czech Republic	Hungary	Bulgaria	Romania
2,6-Di-tert-butyl-p-cresol			STEL: 50.0 mg/m³ TWA: 10.0 mg/m³	

Workers Systemic toxicity

Chemical Name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
2,6-Di-tert-butyl-p-cresol		8.3 mg/kg	5.8 mg/m³			

Workers Local effects

Consumers Systemic toxicity

Chemical Name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
2,6-Di-tert-butyl-p-cresol		5 mg/kg	1.74 mg/m³			

Consumers Local effects

Predicted No Effect Concentration (PNEC)

Chemical Name	Fresh water	Sea water	Fresh water sediment	Sea sediment	Soil
2,6-Di-tert-butyl-p-cresol	1.29 mg/kg	0.0004 mg/L	1.29 mg/kg		1.04 mg/kg

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye Protection Safety glasses with side-shields.

Hand Protection Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.

Skin and body protection Long sleeved clothing.

Respiratory protection No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hygiene measures Regular cleaning of equipment, work area and clothing is recommended.

Environmental Exposure Controls Do not allow material to contaminate ground water system.

Thermal hazards None under normal use conditions

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state @20°C liquid **Appearance** clear , amber

Odor Slight **Odor Threshold** Not Applicable

Property	Values	Note
pH	Not applicable	
Melting Point / Freezing Point	No information available.	
Boiling point/boiling range	No information available.	
Flash point	> 180 °C / > 356 °F	ASTM D 92
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit	No information available.	
Lower flammability limit	No information available.	
Vapor pressure	No information available.	
Vapor density	No information available.	
Relative density	0.9000	g/cm3 @20°C
Solubility(ies)	Insoluble in water	
Partition coefficient: n-octanol/water	Not Applicable	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	> 140 cSt @ 40 °C	ASTM D 445

Explosive properties	Not Applicable
Oxidizing Properties	Not Applicable

9.2 Other information

Viscosity, kinematic (100°C)	No information available
Pour point	No information available
VOC Content	No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal use conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal use conditions

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition

10.5. Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases

10.6. Hazardous decomposition products

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product Information - Principle Routes of Exposure

Inhalation	None known
Eye contact	None known
Skin contact	None known
Ingestion	None known

Acute toxicity - Product Information

Product does not present an acute toxicity hazard based on known information.

Acute toxicity - Component Information

Chemical Name	LD50 Oral (Rat)	LD50 Dermal (Rat/Rabbit)	LC50 Inhalation
Highly refined base oil (Viscosity >20.5 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	
2,6-Di-tert-butyl-p-cresol	5000 mg/kg (Rat)	5000 mg/kg (Rabbit)	

Skin corrosion/irritation None known.

Serious eye damage/eye irritation None known.

Sensitization
Respiratory Sensitization None known.
Skin sensitization None known.

Germ Cell Mutagenicity None known.

Carcinogenicity None known.

Reproductive toxicity None known.

Specific target organ systemic toxicity (single exposure) None known

Specific target organ systemic toxicity (repeated exposure) None known.

Aspiration hazard None known.

SECTION 12: Ecological information

12.1. Toxicity

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

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
2,6-Di-tert-butyl-p-cresol	6: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.42: 72 h Desmodesmus subspicatus mg/L EC50	5: 48 h Oryzias latipes mg/L LC50		

12.2. Persistence and degradability

The product is not readily biodegradable, but it can be degraded by micro-organisms, it is regarded as being inherently biodegradable.

12.3. Bioaccumulative potential

No information available

Chemical Name	log Pow
2,6-Di-tert-butyl-p-cresol	4.17

12.4. Mobility in soil

The product is insoluble and floats on water.

12.5. Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

None known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from Residues / Unused Products	Dispose of as hazardous waste in compliance with local and national regulations
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
Other Data	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

14.1. UN-Number

Not regulated

14.2. UN proper shipping name

Not regulated

14.3. Transport hazard class

Not regulated

14.4. Packing group

Not regulated

14.5. Environmental Hazards

None.

14.6. Special precautions for users

None.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

IMDG/IMO	Not regulated
ADR/RID	Not regulated
ICAO/IATA	Not regulated

SECTION 15: Regulatory information

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

The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008)
Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)

Statutory Instruments: Control of Substances Hazardous to Health Regulations 2002. Chemicals (Hazard Information and Packaging) Regulations 2009.

Acts of Parliament: The Health and Safety at Work etc. Act 1974. Environment Protection Act 1990.
Regulation on classification, labeling. of hazardous chemicals (2002 changing 2005).Appendix VI to Regulation on classification, labeling etc. of hazardous chemicals (2002 changing 2010), list of hazardous substances (as amended). Guidelines for submission and declaration of hazardous waste (2009).Transport of dangerous goods: ADR, RID, IMDG and IATA. Administrative norms for pollution of the atmosphere, 2009.
Workplace exposure limits (EH40)

WGK Classification Hazard to water/Class 2

The highly refined base oil (Viscosity >20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

Chemical Name	CAS-No	EC-No	REACH Registration Number
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated	101316-72-7	309-877-7	01-2119489969-06-xxxx
Lubricating oils (petroleum), used, noncatalytically refined	101316-73-8	309-878-2	02-2119822310-56-xxxx
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	265-090-8	
Residual oils (petroleum), solvent-refined	64742-01-4	265-101-6	01-2119488707-21-xxxx
Extracts (petroleum), residual oil solvent	64742-10-5	265-110-5	01-2119488175-30-xxxx
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0	01-2119467170-45-xxxx
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6	
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	265-157-1	01-2119484627-25-xxxx
Residual oils (petroleum), hydrotreated	64742-57-0	265-160-8	01-2119489287-22-xxxx
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	265-161-3	
Residual oils (petroleum), solvent-dewaxed	64742-62-7	265-166-0	01-2119480472-38-xxxx
Distillates (petroleum), solvent-dewaxed heavy, paraffinic	64742-65-0	265-169-7	01-2119471299-27-xxxx
Paraffin oils (petroleum), catalytic dewaxed heavy	64742-70-7	265-174-4	01-2119487080-42-xxxx
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	276-737-9	01-2119474878-16-xxxx
Lubricating oils (petroleum), C20-C50, hydrotreated neutral oil-based	72623-87-1	276-738-4	01-2119474889-13-xxxx
Lubricating oils	74869-22-0	278-012-2	
Paraffin oils	8012-95-1	232-384-2	
White mineral oil (petroleum)	8042-47-5	232-455-8	01-2119487078-27-xxxx

15.2. Chemical Safety Assessment
No information available.

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet
Repr.-Reproduction toxicity
Asp. Tox. - Aspiration Toxicity
Acute Tox. - Acute Toxicity
Aquatic Acute - Acute Aquatic Toxicity
Aquatic Chronic - Chronic Aquatic Toxicity
Eye Dam. - Eye Damage
Eye Irrit. - Eye Irritation
Skin Corr. - Skin Corrosion
Skin Irrit. - Skin Irritation
Skin Sens. - Skin Sensitizer
Resp. Sens. - Respiratory Sensitizer
STOT SE - Specific target organ systemic toxicity (Single exposure)
STOT RE - Specific target organ systemic toxicity (repeated exposure)
VOC - Volatile organic compounds

Full text of H-Statements referred to under sections 2 and 3

• H224 - Extremely flammable liquid and vapor	• H341 - Suspected of causing genetic defects
• H225 - Highly flammable liquid and vapor	• H350 - May cause cancer
• H226 - Flammable liquid and vapor	• H351 - Suspected of causing cancer
• H270 - May cause or intensify fire; oxidizer	• H360 - May damage fertility or the unborn child
• H271 - May cause fire or explosion; strong oxidizer	• H361 - Suspected of damaging fertility or the unborn child
• H272 - May intensify fire; oxidizer	• H362 - May cause harm to breast-fed children
• H290 - May be corrosive to metals	• H370 - Causes damage to organs
• H300 - Fatal if swallowed	• H371 - May cause damage to organs
• H301 - Toxic if swallowed	• H372 - Causes damage to organs through prolonged or repeated exposure
• H302 - Harmful if swallowed	• H373 - May cause damage to organs through prolonged or repeated exposure
• H304 - May be fatal if swallowed and enters airways	• H400 - Very toxic to aquatic life
• H310 - Fatal in contact with skin	• H410 - Very toxic to aquatic life with long lasting effects
• H311 - Toxic in contact with skin	• H411 - Toxic to aquatic life with long lasting effects
• H312 - Harmful in contact with skin	• H412 - Harmful to aquatic life with long lasting effects
• H314 - Causes severe skin burns and eye damage	• H413 - May cause long lasting harmful effects to aquatic life.
• H315 - Causes skin irritation	• H360Df - May damage the unborn child. Suspected of damaging fertility
• H317 - May cause an allergic skin reaction	• H360D - May damage the unborn child
• H318 - Causes serious eye damage	• H360FD - May damage fertility. May damage the unborn child
• H319 - Causes serious eye irritation	• H360F - May damage fertility
• H330 - Fatal if inhaled	• H361d - Suspected of damaging the unborn child
• H331 - Toxic if inhaled	• H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
• H332 - Harmful if inhaled	• H361f - Suspected of damaging fertility
• H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled	• EUH066 - Repeated exposure may cause skin dryness or cracking
• H335 - May cause respiratory irritation	• EUH210 - Safety data sheet available on request.
• H336 - May cause drowsiness or dizziness	• EUH208 - May produce an allergic reaction
• H340 - May cause genetic defects	

Exposure scenario
No information available.

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Revision Note

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.