

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TEKTRO

Revision date: 21.10.2019

Product code:

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

TEKTRO

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

Industrial lubricants, maintenance oil, hydraulic oil

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: Tektro Technology Corp.
Street: No.138, Minjhu St., Sioushuei Township
Place: Changhua County 504, Taiwan
Telephone: 886-47683999

1.4. Emergency telephone number:

886-47683999

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Aspiration hazard: Asp. Tox. 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

May be fatal if swallowed and enters airways.

Harmful to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic

Signal word: Danger**Pictograms:****Hazard statements**

H304 May be fatal if swallowed and enters airways.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P405 Store locked up.

P501 Dispose of contents/container to local/regional/national/international regulations.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

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SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic			> 95 %
	265-157-1	649-467-00-8		
	Asp. Tox. 1; H304			
128-37-0	2,6-di-tert-butyl-p-cresol			< 2 %
	204-881-4			
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			

Full text of H and EUH statements: see section 16.

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

Note P: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS-No. 200-753-7).

Note L: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 . This note applies only to certain complex oil-derived substances in Appendix I.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

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Suitable extinguishing mediaCarbon dioxide (CO₂). Dry extinguishing powder. alcohol resistant foam. Atomized water.**Unsuitable extinguishing media**

High power water jet.

5.2. Special hazards arising from the substance or mixtureCan be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Safe handling: see section 7

Personal protection equipment: see section 8

6.2. Environmental precautions

Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Wear suitable protective clothing. See section 8.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Recommended storage temperature: 20°C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
128-37-0	2,6-Di-tert-butyl-p-cresol	-	10		TWA (8 h)	WEL

8.2. Exposure controls



Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). DIN EN 166

Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time \geq 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time \geq 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-exceeding exposure limit values

-insufficient ventilation and aerosol or mist formation

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type: P1-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

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Environmental exposure controls

No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	red, clear	
Odour:	characteristic	
pH-Value:		not applicable

Changes in the physical state

Melting point:		-45 °C
Initial boiling point and boiling range:		not determined
Sublimation point:		not determined
Softening point:		not determined
Pour point:		not determined
Flash point:		162 °C
Sustaining combustion:		Not sustaining combustion

Explosive properties

none

Lower explosion limits:		1 vol. %
Upper explosion limits:		7 vol. %
Ignition temperature:		not determined

Auto-ignition temperature

Gas:

not determined

Decomposition temperature:		not determined
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Oxidizing properties

none

Vapour pressure:		not determined
Density (at 15 °C):		0,8577 g/cm ³
Water solubility:		insoluble

Solubility in other solvents

not determined

Partition coefficient:		not determined
Viscosity / dynamic:		not determined
Viscosity / kinematic: (at 40 °C)		9,785 mm ² /s
Flow time:		not determined
Vapour density:		not determined
Evaporation rate:		not determined
Solvent separation test:		not determined
Solvent content:		not determined

9.2. Other information

Solid content:		not determined
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SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic				
	oral	LD50 > 5000 mg/kg	Ratte	ECHA	OECD 401
128-37-0	2,6-di-tert-butyl-p-cresol				
	oral	LD50 >6000 mg/kg	Rat.	ECHA Dossier	
	dermal	LD50 >2000 mg/kg	Rat.	ECHA Dossier	

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic:

In vitro mutagenicity/genotoxicity Method: OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test); Result: negative. Literature information: ECHA Dossier; Carcinogenicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies); Species: Mouse.; Results: Non-carcinogenic if DMSO extract as measured by IP346 is less than 3% w/w. Literature information: ECHA Dossier; Reproductive toxicity: Species: Rat (Sprague-Dawley); Method: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test); Results: NOAEL > 1000 mg/kg Literature information: ECHA Dossier; Developmental toxicity/teratogenicity: Species: Rat (Sprague-Dawley); Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Results: NOAEL >= 2000 mg/kg Literature information: ECHA Dossier

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STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic:

Subacute inhalative toxicity: Method: -; Exposure time: 28d; Species: Rat; Results: NOAEL >980 mg/m³;

Literature information: ECHA Dossier; Subacute dermal toxicity: Method: OECD Guideline 410 (Repeated

Dose Dermal Toxicity: 21/28-Day Study); Exposure time: 28d; Species: Rabbit; Results: 1000 mg/kg;

Literature information: ECHA Dossier

Aspiration hazard

May be fatal if swallowed and enters airways.

Specific effects in experiment on an animal

No data available.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
128-37-0	2,6-di-tert-butyl-p-cresol					
	Acute crustacea toxicity	EC50 mg/l	0,48	48 h	Daphnia magna	ECHA Dossier
	Fish toxicity	NOEC mg/l	0,053	42 d	Oryzias latipes	ECHA Dossier
	Crustacea toxicity	NOEC mg/l	0,023	21 d	Daphnia magna	ECHA Dossier

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic				
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	31%	28	ECHA Dossier	
	Not easily bio-degradable (according to OECD-criteria).				
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	2-4	28	ECHA Dossier	
	Not easily bio-degradable (according to OECD-criteria).				
128-37-0	2,6-di-tert-butyl-p-cresol				
	OECD 301C / ISO 9408 / EEC 92/69 annex V, C.4-F	4,5%	28	ECHA Dossier	
	Not easily bio-degradable (according to OECD-criteria).				

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available.

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Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

Waste disposal number of waste from residues/unused products

130113 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste hydraulic oils; other hydraulic oils; hazardous waste

Waste disposal number of used product

130113 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste hydraulic oils; other hydraulic oils; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

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14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Refer to section 6-8

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2010/75/EU (VOC):	No information available.
2004/42/EC (VOC):	No information available.
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class (D):	1 - slightly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

SECTION 16: Other information**Changes**

Rev. 1.0; Initial release: 21.10.2019

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
 AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
 AGW: Arbeitsplatzgrenzwert
 AVV: Abfallverzeichnisverordnung
 CAS: Chemical Abstracts Service
 CLP: Classification, Labelling and Packaging of substances and mixtures
 DNEL: Derived No Effect Level
 d: day(s)
 EAKV: Europäisches Abfallverzeichnis gemäß Entwurf Abfallverzeichnisverordnung
 EINECS: European INventory of Existing Commercial chemical Substances
 ELINCS: European List of Notified Chemical Substances
 ECHA: European Chemicals Agency
 EWC: European Waste Catalogue
 IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organization
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

h: hour

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect level

NLP: No-Longer Polymers

N/A: not applicable

OECD: Organisation for Economic Co-operation and Development

PNEC: predicted no effect concentration

PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

REACH: Registration, Evaluation, Authorisation of Chemicals

SVHC: substance of very high concern

TRGS Technische Regeln fuer Gefahrstoffe

UN: United Nations

VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe

WGK: Wassergefaehrungsklasse

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Asp. Tox. 1; H304	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H304	May be fatal if swallowed and enters airways.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)