according to regulation 1907/2006/EC (REACH)

## Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 1/(13)

1.	Identification of the mixture and of the company/undertaking	
1.1	Product identifier: Metabond 4T	
1.2	Relevant identified uses of the mixture and uses advised against Relevant identified uses: motor oil additive for high-thermal load engines of four-cycle motorbikes and small garden engines. Uses advised against: no data	
1.3	Details of the supplier of the safety data sheet: Metabond Magyarország Kft. H-9030 Győr, Gyöngyszem utca 18., Hungary Phone / Fax: +36 96 518260	
	Responsible for SDS: Metabond Magyarország Kft. H-9030 Győr, Gyöngyszem utca 18., Hungary Phone / Fax: +36 96 518260 E-mail: metabond@metabond.hu	
1.4	Emergency telephone number Emergency telephone (07-15 <sup>20</sup> h): +36 96 518260 (CET) on workdays Health Toxicological Information Service (ETTSZ 1096 Budapest, Nagyvárad tér 2.) Tel.: +36 1 4766464, or +36 80 201199 National Health Toxicological Information Service:	
2.	Hazards identification	
2.1	Classification of the substance according to regulation 1999/45/EC Human health hazards: Danger symbol not required. Note: Prolonged and/or repeated contact may cause irritation skin or in eyes depending on individual sensitivity ( also Protective equipment).	
	Safety hazards: Danger symbol not required.	
	Environmental hazards: Danger symbol not required. R 52/53 Harmful to aquatic organisms, may cause long-terr adverse effects in the aquatic environment.	1

according to regulation 1907/2006/EC (REACH)

### Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 2/(13)

	Label eleme	ents						
	Product ide	ntification:	Trade name:	Metabon	d 4T			
	Danger symbol(s) and indication(s): <i>not required</i>							
	Hazardous s	ubstance(s):		-				
	The packagin	ng must bear	the inscription	on: -				
	R-phrases: R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.							
	S-phrases:	S 60		ial and its c	ontainer must be o	disposed of as I	hazardous	
		S 61		lease to s/safety data	the environmer sheets.	nt. Refer to	special	
Other liabilities for labelling: Tactile warning of danger: Not required. Transport classification: see section 14. 2.3 Other hazards no data available								
	no data avai	liable						
	Compositio		on on ingred	ients				
		n/informati			neral oils and synt	hetic oils with	additives.	
	<b>Compositio</b> Mixtures Chemical de	on/informati		f refined mi	neral oils and synt	hetic oils with	additives.	
	Composition Mixtures Chemical de Componente	on/informati	Mixture o	f refined mi	Hazard symbol / Hazard classes and	Risk phrase / Hazard	additives. Conc. %(m/m)	
<b>3.</b> 3.1	Composition Mixtures Chemical de Componente	on/informati escription: (s) / Hazardo ame	Mixture o ous componen EU	f refined mi t(s): CAS	Hazard symbol /	Risk phrase /	Conc.	

according to regulation 1907/2006/EC (REACH)

## Trade name: Metabond 4T

Version: 1

Latest revision:

Date of issue: 05. 09. 2013

Page: 3/(13)

	EU	CAS	Hazard symbol /	Risk phrase /	Conc.
Name	number	number	Hazard classes and	Hazard	%(m/m
	number	number	cat.	statements	/0(111/11
Distillates (petroleum),	295-301-9	91995-40-3	67/548/EEC:	$\mathbf{i}$	
dewaxed light			-	- )	
paraffinic, hydrotreated*			(Note L)		
REACH Registr.Nr.:			1272/2008/EC:		
01-211948851 7-24			Asp.Tox.1	H304	
01 211) +0031 / 2+			(Note L)		max. 2
Lubricating oils (petrole-	305-594-8	94733-15-0	67/548/EEC:		Шал. 2
	505-594-8	94755-15-0	0//J40/EEC.		
um), $C_{18-40}$ , solvent-			-	-	
dewaxed hydrocracked			(Note L)		
distillate-based*			1272/2008/EC:		
REACH Registr.Nr.:			Asp.Tox.1	H304	
01-2119486987-11			(Note L)	)	
Mineral oil raffinate*			67/548/EEC:		max. 2
			-	-	
			(Note L)		
			1272/2008/EC:		
			-	-	
			(Note L)		
Zinc alkyl dithiophosphate	272-028-3	68649-42-3	67/548/EEC:		max. 2.
X ¥			Xi, N	R 38, R 41,	
REACH Registr. Nr.:			111, 11	R 51/53	
01-20119493626-26			1272/2008/EC:	K 51/55	
01-20119493020-20			Skin Irrit. 2	H315	
			Eye Dam. 1	H318	
	272.240.4		Aquatic Chronic 2	H411	
Bis(nonylphenyl)amine	253-249-4		67/548/EEC:		max.2.4
REACH Registr. Nr.:			-	R 53	
01-2119489811-28			1272/2008/EC:		
			Aquatic Chronic 4	H413	
Phenol, dodecyl-branched	310-154-3	121158-58-5	67/548/EEC:		max. 0.2
★ 🕹			Xi, N	R 62	
REACH Registr. Nr.:				(Repr. 3 cat.),	
01-2119513207-49				R 36/38,	
				R 50/53	
			1272/2008/EC:	1.00,00	
			Repr. 2	H361	
			Skin Irrit. 2	H315	
			Eye Irriit 2	H315 H319	
			•		
			Aquatic Acute 1	H400	
			Aquatic Chronic 1	H410	

according to regulation 1907/2006/EC (REACH)

### Trade name: Metabond 4T

Version: 1

Latest revision:

Date of issue: 05. 09. 2013

Page: 4/(13)

Name	EU number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. %(m/m)
Alkylated phenol	204-884-0	128-39-2	67/548/EEC:		max. 0.2
★ <u></u>			Xi, N	R 38, R 50/53	
REACH Registr.Nr.:			1272/2008/EC:		
01-2119490822-33			Skin Irrit. 2	H315	
			Aquatic Acute 1	H400	
			Aquatic Chronic 1	H410	
Diphenylamine	204-539-4	122-39-4	67/548/EEC:		max. 0.2
A 1			T, N	R 23/24/25,	
				R 33, R 50/53	
			1272/2008/EC:		
			Acute Tox. 3	H301	
			Acute Tox. 3	H311	
			Acute Tox. 3	H331	
			STOT RE 2	H373	
			Aquatic Acute 1	H400	
			Aquatic Chronic 1	H410	

\*: with exposure limit

The full text of each relevant R-, H- phrase and Hazard classes and cat. see in Section 16.

### 4. First aid measures

#### 4.1 Description of first aid measures

General information: Never give anything by mouth to an unconscious person, or never induce vomiting.

- Inhalation: Remove the affected person to fresh air. If symptoms persist, seek medical attention.
- SkinRemove contaminated clothing. Wash skin with large amounts of water, use<br/>soap. If symptoms persist, seek medical attention.
- Eye contact: Flush eyes with plenty of water for 10-15 minutes. If symptoms persist, seek medical attention.

Ingestion: If swallowed, give water. Do not induce vomiting. Get medical attention.

according to regulation 1907/2006/EC (REACH)

### Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 5/(13)

- 4.2 Most important symptoms and effects, both acute and delayed No data.
- 4.3 Indication of any immediate medical attention and special treatment need Not required.

#### 5. Fire-fighting measures

Fire hazards: See also Section 9 - flash point.

5.1 Extinguishing media Suitable extinguishing media: Foam, carbon dioxide, dry chemical powder.

> Unsuitable extinguishing media: Water jet.

 5.2 Special hazards arising from the mixture Hazardous combustion products: On burning, carbon dioxide, carbon monoxide, nitrogen oxides, sulphur oxide, phosphor oxides, zinc oxide, various hydrocarbons and soot can be formed.

# 5.3 Advice for fire-fightersSpecial protective equipment: According to the existing fire-fighting regulations. Respiratory protection.

Further information:

### 6. Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Personal precautions: see Section 8.
- 6.2 Environmental precautions:

Confine spills to prevent material from entering sewers, watercourses, drains and into soil Notify relevant authority.

according to regulation 1907/2006/EC (REACH)

## Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 6/(13)

6.3	<ul> <li>Methods and material for containment and cleaning up</li> <li>On soil: Contain spilled liquid with sand, earth or other suitable absorbents. Dispose of according to local regulations.</li> <li>On water: Confine the spillage. Remove from surface by skimming or suitable absorbents. Notify local authorities according to regulations.</li> </ul>
6.4	Reference to other sections Personal precautions: see section 8. Waste treatment methods: see section 13.
7.	Handling and storage
7.1	<ul> <li>Precautions for safe handling</li> <li>Keep general measures applied for normal operations with lubricants.</li> <li>Keep away from radiant heat and open flame.</li> <li>Avoid contact with skin and eyes. Avoid prolonged breathing of oil vapours or mists.</li> <li>Avoid splashing the product.</li> <li>Ensure washing facilities after working hours and before breaks. Take off contaminated or oil-soaked clothing, wash with warm water and soap.</li> <li>When using do not eat, drink or smoke.</li> <li>Handling temperature: not known</li> </ul>
7.2	Conditions for safe storage, including any incompatibilities Storage facilities must comply with regulations for storing of flammable liquids. Store in dry, well ventilated place in original, closed containers. Keep away from radiant heat, open flame and strong oxidizing agents. Storage temperature: max. 40°C
7.3	Specific end use(s) motor oil additive for high-thermal load engines of four-cycle motorbikes and small garden engines
8.	Exposure controls / personal protection
	Engineering control measures: Not required.
8.1	Control parameters:Mineral oil mist:TWA: 5 mg/m³; STEL: 10 mg/m³, for oil mist, vapour excluded (ACGIH).Method of testing, recommended: NIOSH 5026

according to regulation 1907/2006/EC (REACH)

## Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 7/(13)

8.2	Exposure controls Personal protection: Respiratory protection: Hand protection: Eye protection: Skin protection: Other special:	<ul> <li>Breathing apparatus not required.</li> <li>Oil resistant gloves (EN 374, Breakthrough time 480 min) (e.g. nitrile rubber – minimal thickness 0.33 mm).</li> <li>Note: Manufacturer's directions for use and the conditions of application should be observed.</li> <li>Protective goggles not required.</li> <li>Protective clothing (oil resistant).</li> <li>no data</li> </ul>					
	Environmental exposure controls: Do not discharge into drains/surface waters/groundwater.						
9.	Physical and chemical pro	perties					
9.1	Information on basic physical and chemical properties						
	Appearance:						
	Physical state:	liquid					
	Colour:	brown, clear					
	Odour:	characteristic, not unpleasant petroleum odour					
	Change in physical state:						
	Pour point (ISO 3016):	not available					
	Boiling point:	not available					
	Others:						
	Flash point (COC) (EN	ISO 2592): >150°C					
	Ignition point (EN ISO						
	Autoignition temperatur						
	Explosive properties:	not explosive					
	Oxidizing properties:	not available					
	Vapour pressure at 20°C						
	Density at 15°C (EN IS)						
	Solubility in water:	practically insoluble in water					
	Solubility in other solve						
	n-Octanol/water partition						
	Vapour density:	not available					
	Evaporation Rate:	not available					

according to regulation 1907/2006/EC (REACH)

## Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 8/(13)

		viscosity at 40° viscosity at 100		104): typ.	70.05 mm <sup>2</sup> /s 10.5 mm <sup>2</sup> /s applicable	
9.2	Other informati no data ava					
10.	Stability and re	eactivity				
10.2	Reactivity: Chemical stabil Possibility of ha	ity: No azardous	-	-	own. and handled properly.	
10.5	reactions: Conditions to a Incompatible m	void: Di aterials: Str	t known. rect heat or igr ong oxidizing	agents.		
10.0	Hazardous deco products:	-	-	-	n products are formed under normal outputs products: See Section 5.	
11.	Toxicological i	nformation				
11.1	Information on Acute toxicity:	toxicological et	ffects			
	Oral: Dermal:	$LD_{50}$ (rat) $LD_{50}$ (rabbit)	> 2000 > 2000	mg/kg mg/kg	(based on components) (based on components)	
	Acute toxicity: irritation         Skin:       not irritant (based on components)         Eye:       not irritant (based on components)         Note:       Prolonged and/or repeated contact may cause irritation on skin or in eyes depending on individual sensitivity.					
	Respiratory or s	skin sensitisatio	n: not sens	sitising (bas	ed on components)	
	Other information, specific effects:					

according to regulation 1907/2006/EC (REACH)

## Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 9/(13)

	Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard:	not known, resp. not mutagen (based on components) not known, resp. not carcinogen (based on components) not known, resp. no reproduction-damaging effect (based on components) not known not known not known
12.	Ecological information	
12.1	Toxicity Aquatic organisms: Soil organisms: Plants:	No data for the product.
12.2	Persistence and degradability Biodegradability:	No data available. No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility Mobility in soil Mobility in water:	Absorbs in soil. Floats on water.
12.5	Results of PBT and vPvB assessment	Not required.
12.6	Other adverse effects Heavy metal content: PCT, PCB and other chlorinated hydrocarbons: Environmental effects: Water hazard class (German):	None. None. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. -

according to regulation 1907/2006/EC (REACH)

#### Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 10/(13)

#### **13.** Disposal considerations

- 13.1 Waste treatment methods
  - Product disposal:

Wastes of the product or used oil should be treated as hazardous waste. EWC cod: 13 02 05\*

Mineral-based non-chlorinated engine, gear and lubricating oils.

Disposal must be in compliance with national and local regulations.

Packaging disposal:

Containers with product residue should also be treated as hazardous waste according to national and local disposal regulations. EWC cod: 15 01 10\*

Packaging containing residues of or contaminated by dangerous substances.

Disposal must be in compliance with national and local regulations.

Recommended waste treatment method: incineration

Wastewater:

Quality of wastewater emitted to natural water must comply with national and local regulations.

Care should be taken in any case to ensure compliance with EC, national and local regulations. It is the responsibility of the user to know all relevant national and local regulations.

#### **14.** Transport information

Land transport: Road/ Railway	ADR/RID:	Not classified.
Waterways: Inland waterways/ Sea transport	ADN/IMDG:	Not classified.
Air transport:	ICAO / IATA:	Not classified.

according to regulation 1907/2006/EC (REACH)

### Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 11/(13)

#### **15. Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the mixture. This safety data sheet has been prepared according to Regulation 1907/2006/EC (mod.: 453/2010/EC).
- 15.2 Chemical safety assessment. not available

#### 16. Other information

The information given in this data sheet is based on our best knowledge at the time of publication. The information is related only to this product and is intended to assist its safe transport, handling and use. The given physical and chemical parameters describe the product only for the purpose of safety requirements and therefore should not be construed as guaranteeing any specific property of the product or as being part of a product specification or any contract.

The manufacturer or supplier shall not take responsibility for any damages from the use other than recommended or other misuse of the product. It is the responsibility of the user to keep regulatory precautions and observe recommendations for safe use of the product.

Source of data presented in this material safety data sheet: Test results of this product Material safety data sheets of product's components Hungarian and EU lists of dangerous substances Relevant Hungarian regulation and EU directives

The full text of each relevant R-, H- phrase and Hazard classes and cat. in Section 3.:

R 23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R 33	Danger of cumulative effects.
R 36/38	Irritating to eyes and skin.
R 38	Irritating to skin.
R 41	Risk of serious damage to eyes.
R 50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in
	the aquatic environment.
R 53	May cause long-term adverse effects in the aquatic environment.
R 62	Possible risk of impaired fertility.

according to regulation 1907/2006/EC (REACH)

### Trade name: Metabond 4T

Version: 1 Latest revision:

Date of issue: 05. 09. 2013

Page: 12/(13)

H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure
110,0	through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
11115	They eause rong fushing harmen encets to aquate file.
Acute Tox. 3	Acute toxicity Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Repr. 2	Reproductive toxicity Category 2
STOT RE 2	Specific target organ toxicity – repeated exposure Category 2
Aquatic Acute 1	Hazardous to the aquatic environment, Acute Category 1
Aquatic Chronic	c 1 Hazardous to the aquatic environment, Chronic Category 1
Aquatic Chronic	
Aquatic Chronic	
•	
Legend:	
ADN H	European Agreement concerning the International Carriage of Dangerous Goods by Inland
	Waterways
	European Agreement concerning the International Carriage of Dangerous Goods by Road
	Acute Toxicity Estimate
	Biocontrentration Factor
	Biological Oxygen Demand Body Weight
	Classification and Labeling
	Chemical Abstracts Service
CLP (	Classification, Labelling and Packaging (1272/2008/EC)

according to regulation 1907/2006/EC (REACH)

### Trade name: Metabond 4T

Version: 1 Lat

Latest revision:

Date of issue: 05. 09. 2013

Page: 13/(13)

٦

Section	Subjec	t of change	Date	Version			
levision I	ndicator	3:					
vPvI	D	Very Persistent and very Bio-accumulative					
VOC		Volatile organic compounds					
VOC	r	materials Velatile organic compounds					
UVC	_D	substance of unknown or variable composition, complex re	eaction products or	biological			
SVH		Substance of Very High Concern	nation products or 1	hiological			
RID		Regulations concerning the International carriage of Dange	erous Goods by Rai	I			
REA		Registration, Evaluation, Authorisation and Restriction of C		1			
ppm		parts/million	Chamicals				
PNE		Predicted No-Effect Concentration					
PBT		Persistent Bioaccumulative and Toxic					
OEC		Organisation for Economic Cooperation and Development					
NOA		No-Longer Polymer No Observed Adverse Effect Level					
NLP							
NOE		No observed effect level					
NOE		No observed effect concentration					
LOE	EL	Lowest Observed Effect Level					
LOE	EC	Lowest Observed Effect Concentration					
LOA	EL	Lowest Observed Adverse Effect Level					
LOA	AEC	Lowest Observed Adverse Effect Concentration					
LDx		Lethal Dose x%) Halálos dózis x%					
LCx		Lethal Concentration x%					
IMD	G	International Maritime Dangerous Goods					
IAT	A	International Air Transport Association					
IAR		International Agency for Research on Cancer					
ESIS	5	European Chemical Substances Information System					
ES		Exposure Scenario					
ELIN		European List of Notified Chemical Substances					
	number	European Community number					
EC		European Community					
Edx	50	Effective Dose x%					
ErC:	50	EC50 in terms of reduction of growth rate					
Ecx	17.1	Effective Concentration x%					
ECH		European Cheamicals Agency					
DNE		Derived No Effect Level					
DMI		Derived Minimal Effect Level					
CSA		Chemical Safety Report					
COE CSA		Chamical Oxygen Demand Chemical Safety Assessment					
COL	R	Carcigonic, Mutagenic or toxic to Reproduction					