according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 1/(11)

1. Identification of the mixture and of the company/undertaking

1.1 Product identifier:

Metabond ECO

1.2 Relevant identified uses of the mixture and uses advised against

Relevant identified uses: additive for car

Uses advised against: no data

1.3 Details of the supplier of the safety data sheet:

METABOND Magyarország Kft.

H-9030 Győr, Csonkaér u. 5., Hungary

Phone / Fax: +36 96 332-738

Responsible for SDS:

METABOND Magyarország Kft.

H-9030 Győr, Csonkaér u. 5., Hungary

Phone / Fax: +36 96 332-738 E-mail: lianos@metabond.hu

1.4 Emergency telephone number

Emergency telephone (07-15²⁰ h): +36 96 332-738 (CET) on workdays

Health Toxicological Information Service (ETTSZ 1096 Budapest, Nagyvárad tér 2.)

Tel.: +36 1 476 6464, or +36 80 201 199

National Health Toxicological Information Service:

2. Hazards identification

2.1 Classification of the substance according to regulation 1999/45/EC

Human health hazards: Xi (irritant)

R 36/38 Irritating to eyes and skin.

Safety hazards: Danger symbol not required.

Environmental hazards: Danger symbol not required.

R 52/53 Harmful to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 2/(11)

2.2 Label elements

Product identification: Trade name: Metabond ECO

Danger symbol(s) and indication(s):

Xi

Hazardous substance(s):

The packaging must bear the inscription:

R-phrases: R 36/38 Irritating to eyes and skin.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

S-phrases: S 2 Keep out of the reach of children.

S 24/25 Avoid contact with skin and eyes.

S 60 This material and its container must be disposed of as hazardous

waste

S 61 Avoid release to the environment. Refer to special

instructions/Safety data sheets

Other liabilities for labelling:

Tactile warning of danger: Not required. Transport classification: see section 14.

2.3 Other hazards

no data available

3. Composition/information on ingredients

3.1 Mixtures

Chemical description: Mixture of refined mineral oils with additives.

according to regulation 1907/2006/EC (REACH)

Trade name: Metabond ECO

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 3/(11)

Component(s) / Hazardous component(s):

Name	EINECS number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. %(m/m)
4,4'-methylene bis(dibutyldithiocarbamate)	233-593-1	10254-57-6	67/548/EEC: Xi 1272/2008/EC:	R 36/38	max. 28
			Skin Irrit. 2 Eye Irrit. 2	H315 H319	
Distillates (petroleum), dewaxed light paraffinic, hydrotreated* REACH Registr.Nr.:	295-301-9	91995-40-3	67/548/EEC: - (Note L) 1272/2008/EC:	-	
01-211948851 7-24			Asp.Tox.1 (Note L)	H304	max. 20
Lubricating oils (petrole- um), C ₁₈₋₄₀ , solvent- dewaxed hydrocracked	305-594-8	94733-15-0	67/548/EEC: - (Note L)	-	max. 20
distillate-based* REACH Registr.Nr.: 01-2119486987-11			1272/2008/EC: Asp.Tox.1 (Note L)	H304	
Dec-1-ene, homopolymer, hydrogenated	500-183-1	68037-01-4	67/548/EEC: Xn 1272/2008/EC:	R 65	max. 20
Zinc dialkyl	272-028-3	68649-42-3	Asp.Tox.1 67/548/EEC:	H304	max. 1,9
dithiophosphate	272 020 3	00017 12 3	Xi, N 1272/2008/EC: not reported	R 38, R 51/53	max. 1,5
Zinc dialkyl dithiophosphate	272-028-3	68649-42-3	67/548/EEC: Xi, N	R 41, R 38, R 51/53	max. 1,9
			1272/2008/EC: not reported		
Substituted phenol with polyolefin, calcium salt		polymer	67/548/EEC:		max. 1,9
			- 1272/2008/EC: not reported	R 53	
Polyolefin anhydride		polymer	67/548/EEC: - 1272/2008/EC: not reported	R 53	max. 1,9

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 4/(11)

Name	EINECS number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. %(m/m)
Boron nitride			67/548/EEC: Xi 1272/2008/EC: not reported	R 36/37	max. 1,8
p-Dodecylphenol	310-154-3	121158-58-5	67/548/EEC: Xn, N 1272/2008/EC: not reported	R 38, R 50/53, R 62	max. 0,35
Diphenylamine \$\mathbb{L}\$	204-539-4	122-39-4	67/548/EEC: T, N 1272/2008/EC: not reported	R 23/24/25, R 33, R 50/53	max. 0,35

^{*:} 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 rapid recovery does not occur,

obtain medical attention.

Skin Wash skin with large amounts of water, use soap. In case of persistent

contact: irritation, get medical attention.

Eye contact: Flush eyes with plenty of water for 10-15 minutes. In case of persistent

irritation, get medical attention.

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

4.2 Most important symptoms and effects, both acute and delayed No data available.

4.3 Indication of any immediate medical attention and special treatment need Not required.

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 5/(11)

5. Fire-fighting measures

Fire hazards:

Moderately hazardous (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, sulphur oxide, phosphor oxides, zinc oxide, various hydrocarbons and soot can be formed.

5.3 Advice for fire-fighters

Special 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.

6.3 Methods and material for containment and cleaning up

On soil: Contain spilled liquid with sand, earth or other suitable absorbents.

Dispose of according to local regulations.

On water: Confine the spillage. Remove from surface by skimming or suitable

absorbents. Notify local authorities according to regulations.

6.4 Reference to other sections

Personal precautions: see section 8.

Waste treatment methods: see section 13.

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 6/(11)

7. Handling and storage

7.1 Precautions for safe handling

Keep general measures applied for normal operations with lubricants.

Keep away from radiant heat and open flame.

Avoid contact with skin and eyes. Avoid prolonged breathing of oil vapours or mists.

Avoid splashing the product.

Ensure washing facilities after working hours and before breaks. Take off contaminated or oil-soaked clothing, wash with warm water and soap.

When using do not eat, drink or smoke.

Handling temperature: not known

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)

Additiv for car

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

8.2 Exposure controls

Personal protection:

Respiratory protection: Breathing apparatus not required.

Hand protection: Oil resistant gloves (EN 374, Breakthrough time 480 min)

(e.g. nitrile rubber – minimal thickness 0.33 mm).

Note: Manufacturer's directions for use and the conditions of

application should be observed. Protective goggles not required.

Eye protection: Protective goggles not required.
Skin protection: Protective clothing (oil resistant).

Other special: no data

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 7/(11)

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: liquid
Colour: brown, clear

Odour: characteristic, not unpleasant petroleum

odor

Change in physical state:

Pour point (ISO 3016): not available Boiling point: not available

Others:

Flash point (COC) (EN ISO 2592): 170°C

Ignition point (EN ISO 2592):

Autoignition temperature:

Explosive properties:

Oxidizing properties:

Vapour pressure at 20°C:

Density at 15°C (EN ISO 12185):

not available
not available
not available

Solubility in water: practically insoluble in water gasoline, kerosene, toluene, etc.

n-Octanol/water partition coefficient:

Vapour density:

Evaporation Rate:

Kinematic viscosity at 40°C (EN ISO 3104):

Kinematic viscosity at 100°C (EN ISO 3104):

pH:

not available

typ. 194.9 mm²/s

typ.19.17 mm²/s

not applicable

9.2 Other information

no data available

10. Stability and reactivity

10.1 Reactivity: Dangerous reactivity not known.

10.2 Chemical stability: No decomposition if stored and handled properly.

10.3 Possibility of hazardous

reactions: Not known.

10.4 Conditions to avoid: Direct heat or ignition sources. 10.5 Incompatible materials: Strong oxidizing agents.

10.6 Hazardous decomposition No dangerous decomposition products are formed under normal

products: conditions. Hazardous combustion products: See Section 5.

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 8/(11)

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Oral: LD_{50} (rat) > 2000 mg/kg (based on components) Dermal: LD_{50} (rabbit) > 2000 mg/kg (based on components)

Acute toxicity: irritation

Skin: irritant (based on components)
Eye: irritant (based on components)

Respiratory or skin sensitisation: not sensitising (based on components)

Chronic toxicity: not known
Repeated dose toxicity: not known

Other information, specific effects:

Note L: The classification as a carcinogen need not apply according to 1272/2008/EC, because it can be shown that the substance contains less than 3 % DMSO extract as

measured by IP 346.

Carcinogen effect: not known, resp. not carcinogen (based on

components)

Mutagen effect: not known, resp. not mutagen (based on components)
Reproduction-damaging not known, resp. no reproduction-damaging effect

effect: (based on components)

12. Ecological information

12.1 Toxicity No data for the product.

Aquatic organisms: Soil organisms:

Plants:

12.2 Persistence and degradability No data available.

Biodegradability: No data available.

12.3 Bioaccumulative potential No data available.

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 9/(11)

12.4 Mobility

Mobility in soil Absorbs in soil. Mobility in water: Floats on water.

12.5 Results of PBT and vPvB Not required.

assessment

12.6 Other adverse effects

Heavy metal content: None. PCT, PCB and other chlorinated None.

hydrocarbons:

Environmental effects: Harmful to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

Water hazard class (German): -

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.

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 10/(11)

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.

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

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond ECO**

Version: 1 Latest revision: Date of issue: 14. 09. 2012 Page: 11/(11)

Classification of the mixture according to regulation 1272/2008/EC

Hazard Class and Category: Hazard statement:

not available

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 36/37 Irritating to eyes and respiratory system.

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 51/53 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.

R 65 Harmful: may cause lung damage if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Asp.Tox. 1 Aspiration hazard Category 1

Skin Irrit. 2 Skin corrosion/irritation Category 2

Eye Irrit. 2 Serious eye damage/eye irritation Category 2

Revision Indicators:

Section	Subject of change	Date	Version