

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3

Latest revision: 28.01.2014

Date of issue: 14. 09. 2012

Page: 1/(14)

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

1.1 Product identifier:

Metabond GT+

1.2 Relevant identified uses of the mixture and uses advised against

Relevant identified uses: transmission-oil additive for gears, manual clutches and conventional differentials.

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 (07-15²⁰ 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:

R 36

R 43

Xi (irritant)

Irritating to eyes.

May cause sensitisation by skin contact.

Safety hazards:

Danger symbol not required.

Environmental hazards:

R 52/53

Danger symbol not required.

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

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3

Latest revision: 28.01.2014

Date of issue: 14. 09. 2012

Page: 2/(14)

2.2 Label elements

Product identification: Trade name: **Metabond GT+**

Danger symbol(s) and indication(s):



Hazardous substance(s): Di tercier butyl polysulphide;
Reaction products of bis(4-methylpentan-2-yl)
dithiophosphoric acid with phosphorous oxide,
propylene oxide and amines, C12-C14
alkyl(branched)

The packaging must bear the inscription: Contains (Z)-octadec-9-enylamine. May produce
an allergic reaction.

R-phrases: R 36 Irritating to eyes.
R 43 May cause sensitisation by skin contact.
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 26 In case of contact with eyes, rinse immediately with plenty of
water and seek medical advice.
S 37/39 Wear suitable gloves and eye/face protection.
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

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3

Latest revision: 28.01.2014

Date of issue: 14. 09. 2012





Page: 3/(14)

3. Composition/information on ingredients

3.1 Mixtures

Chemical description: Mixture of refined mineral oils and synthetic oils with additives.

Component(s) / Hazardous component(s):

Name	EU number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. % (m/m)
Di tercier butyl polysulphide 	polymer	-	67/548/EEC: Xi 1272/2008/EC: Skin Sens. 1 Aquatic Chronic 4	R 43, R 53 H 317 H413	max. 28
Distillates (petroleum), dewaxed light paraffinic, hydrotreated* REACH Registr.Nr.: 01-211948851 7-24	295-301-9	91995-40-3	67/548/EEC: - (Note L) 1272/2008/EC: Asp.Tox.1 (Note L)	- H304	max. 20
Lubricating oils (petroleum), C ₁₈₋₄₀ , solvent-dewaxed hydrocracked distillate-based* REACH Registr.Nr.: 01-2119486987-11	305-594-8	94733-15-0	67/548/EEC: - (Note L) 1272/2008/EC: Asp.Tox.1 (Note L)	- H304	
4,4'-methylene bis(dibutylthiocarbamate) 	233-593-1	10254-57-6	67/548/EEC: - 1272/2008/EC: Aquatic Chronic 4	R 53 H413	max. 15
Reaction products of bis(4-methylpentan-2-yl) dithiophosphoric acid with phosphorous oxide, propylene oxide and amines, C12-C14 alkyl(branched)  	931-384-6	-	67/548/EEC: Xn, N 1272/2008/EC: Acute Tox. 4 Aquatic Chronic 2 Eye Dam. 1 Flam.Liq. 3 Skin Sens. 1	R 22, R 41, R 43, R 51/53 H302 H411 H318 H226 H317	max. 7

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3

Latest revision: 28.01.2014

Date of issue: 14. 09. 2012

Page: 4/(14)

Name	EU number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. % (m/m)
(Z)-N-9-octadecenylpropane-1,3-diamine 	230-528-9	7173-62-8	67/548/EEC: Xi, N 1272/2008/EC: Acute Tox. 3 Aquatic Acute 1 Aquatic Chronic 1 Eye Dam. 1 Met. Corr. 1 Skin Irrit. 2	R 38, R 41, R 50/53 H301 H400 H410 H318 H290 H315	max. 0.55
(Z)-octadec-9-enylamine 	204-015-5	112-90-3	67/548/EEC: C, N 1272/2008/EC: Acute Tox. 4 Eye Dam. 1 Skin Corr. 1C Skin Sens. 1 Aquatic Acute 1	R 22, R 34, R 43, R 50 H302 H318 H314 H317 H400	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 symptoms persist, seek medical attention.

Skin contact: Remove contaminated clothing. Wash skin with large amounts of water, use 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.

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3 Latest revision: 28.01.2014 Date of issue: 14. 09. 2012 Page: 5/(14)

4.2 Most important symptoms and effects, both acute and delayed

May cause sensitisation by skin contact.

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-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.

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3 Latest revision: 28.01.2014 Date of issue: 14. 09. 2012 Page: 6/(14)

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.

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)

Transmission-oil additive for gears, manual clutches and conventional differentials.

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

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3 Latest revision: 28.01.2014 Date of issue: 14. 09. 2012 Page: 7/(14)

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.

Eye protection: Protective goggles not required, but recommended.

Skin protection: Protective clothing (oil resistant).

Other special: no data

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

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 odour

Change in physical state:

Pour point (ISO 3016): not available

Boiling point: not available

Others:

Flash point (COC) (EN ISO 2592): 130°C

Ignition point (EN ISO 2592): not available

Autoignition temperature: not available

Explosive properties: not explosive

Oxidizing properties: not available

Vapour pressure at 20°C: negligible

Density at 15°C (EN ISO 12185): not available

Solubility in water: practically insoluble in water

Solubility in other solvents: gasoline, kerosene, toluene, etc.

n-Octanol/water partition coefficient: not available

Vapour density: not available

Evaporation Rate: not available

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3

Latest revision: 28.01.2014

Date of issue: 14. 09. 2012

Page: 8/(14)

Kinematic viscosity at 40°C (EN ISO 3104): typ. 70.04 mm²/s

Kinematic viscosity at 100°C (EN ISO 3104): typ. 11.41 mm²/s

pH: 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 products: No dangerous decomposition products are formed under normal conditions. Hazardous combustion products: See Section 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Oral: LD₅₀ (rat) > 2000 mg/kg (based on components)

Dermal: LD₅₀ (rabbit) > 2000 mg/kg (based on components)

Acute toxicity: irritation

Skin: not irritant (based on components)

Note: Prolonged and/or repeated contact may cause irritation on skin depending on individual sensitivity.

Eye: irritant (based on components)

Respiratory or skin sensitisation: sensitising (based on components)

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.

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3 Latest revision: 28.01.2014 Date of issue: 14. 09. 2012 Page: 9/(14)

Germ cell mutagenicity:	not known, resp. not mutagen (based on components)
Carcinogenicity:	not known, resp. not carcinogen (based on components)
Reproductive toxicity:	not known, resp. no reproduction-damaging effect (based on components)
STOT-single exposure:	not known
STOT-repeated exposure:	not known
Aspiration hazard:	not known

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.
12.4 Mobility	
Mobility in soil	Absorbs in soil.
Mobility in water:	Floats on water.
12.5 Results of PBT and vPvB assessment	Not required.
12.6 Other adverse effects	
Heavy metal content:	None.
PCT, PCB and other chlorinated hydrocarbons:	None.
Environmental effects:	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Water hazard class (German):	-

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3

Latest revision: 28.01.2014

Date of issue: 14. 09. 2012

Page: 10/(14)

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.

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3

Latest revision: 28.01.2014

Date of issue: 14. 09. 2012

Page: 11/(14)

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 22	Harmful if swallowed.
R 34	Causes burns.
R 38	Irritating to skin.
R 41	Risk of serious damage to eyes.
R 43	May cause sensitisation by skin contact.

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3 Latest revision: 28.01.2014 Date of issue: 14. 09. 2012 Page: 12/(14)

R 50	Very toxic to aquatic organisms.
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.
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
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.
Flam. Liq. 3	Flammable liquid Category 3
Met. Corr. 1	Substance or mixture corrosive to metals Category 1
Acute Tox. 3	Acute toxicity Category 3
Acute Tox. 4	Acute toxicity Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Sens. 1	Respiratory/skin sensitization Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Aquatic Acute 1	Hazardous to the aquatic environment, Acute Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, Chronic Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, Chronic Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment, Chronic Category 4

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3

Latest revision: 28.01.2014

Date of issue: 14. 09. 2012

Page: 13/(14)

Legend:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BOD	Biological Oxygen Demand
Bw	Body Weight
C&L	Classification and Labeling
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging (1272/2008/EC)
CMR	Carcinogenic, Mutagenic or toxic to Reproduction
COD	Chemical Oxygen Demand
CSA	Chemical Safety Assessment
CSR	Chemical Safety Report
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
ECHA	European Chemicals Agency
Ec _x	Effective Concentration x%
ErC ₅₀	EC ₅₀ in terms of reduction of growth rate
Ed _x	Effective Dose x%
EC	European Community
EC number	European Community number
ELINCS	European List of Notified Chemical Substances
ES	Exposure Scenario
ESIS	European Chemical Substances Information System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC _x	Lethal Concentration x%
LD _x	Lethal Dose x%) Halálos dózis x%
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest Observed Effect Level
NOEC	No observed effect concentration
NOEL	No observed effect level
NLP	No-Longer Polymer
NOAEL	No Observed Adverse Effect Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts/million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH)

Trade name: **Metabond GT+**

Version: 3 Latest revision: 28.01.2014 Date of issue: 14. 09. 2012 Page: 14/(14)

RID	Regulations concerning the International carriage of Dangerous Goods by Rail
SVHC	Substance of Very High Concern
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bio-accumulative

Revision Indicators:

Section	Subject of change	Date	Version
2	Hazards identification	05.09.2013	2
3	Composition/information on ingredients		
9	Physical and chemical properties		
11	Toxicological information		
1-16	Regulatory information, other corrections		
3.	Composition/information on ingredients	28.01.2014	3