



**321 Motorsystem-Additive**

Print date: 01.12.2016

Product code: 11A01321030AB

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

**1.1. Product identifier**

321 Motorsystem-Additive

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

**Use of the substance/mixture**

Additive

**1.3. Details of the supplier of the safety data sheet**

Company name:	TUNAP Deutschland Vertriebs GmbH & Co. Betriebs KG	
Street:	Bürgermeister-Seidl-Str. 2	
Place:	D-82515 Wolfratshausen	
Telephone:	+49 (0) 8171/1600 - 0	Telefax: +49 (0) 8171/1600 - 40
e-mail:	sdb@tunap.com	
Internet:	www.tunap.com	

**1.4. Emergency telephone number:** +49 (0) 30 30 686 790 (Giftnotruf Berlin)

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Regulation (EC) No. 1272/2008**

Hazard categories:

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

**Regulation (EC) No. 1272/2008**

**Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P273 Avoid release to the environment.

P280 Wear eye/face protection.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**



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**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic			25 - < 50 %
	265-157-1		01-2119484627-25	
	Asp. Tox. 1; H304			
36878-20-3	bis(nonylphenyl)amine			1 - < 3 %
	253-249-4		01-2119488911-28	
	Aquatic Chronic 4; H413			
68937-41-7	Propylated triphenyl phosphate			0.1 - < 1 %
	273-066-3			
	Repr. 2, STOT RE 2, Aquatic Chronic 2; H361fd H373 H411			
121158-58-5	Phenol, dodecyl-, branched			< 0.1 %
	310-154-3		01-2119513207-49	
	Repr. 2, Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H361 H315 H319 H400 H410			

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

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

**After inhalation**

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with skin**

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with eyes**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

**After ingestion**

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

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

Headache, nausea, dizziness, fatigue, skin irritation

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

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Water fog. Foam. Carbon dioxide (CO2). Extinguishing powder.

**Unsuitable extinguishing media**

High power water jet.



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**5.2. Special hazards arising from the substance or mixture**

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO<sub>2</sub>, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

**5.3. Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Wear personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

**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). Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Observe instructions for use.  
Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.  
When using do not eat, drink, smoke, sniff.  
Wear personal protection equipment (refer to section 8).

**Advice on protection against fire and explosion**

Keep away from sources of ignition. - No smoking.

**Further information on handling**

Avoid contact with skin and eyes.

**7.2. Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

Keep container tightly closed. Observe legal regulations and provisions.

**Advice on storage compatibility**

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

**Further information on storage conditions**

Protect from frost.

**7.3. Specific end use(s)**



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No information available.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Additional advice on limit values**

- a no restriction
- b End of exposure or shift
- c in long-term exposure: after several shifts
- d prior to next shift

STEL (EC) : Short Term Exposure Limit

TWA (EC): time-weighted average

U: Urea

B: Blood

**8.2. Exposure controls**

**Protective and hygiene measures**

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

**Eye/face protection**

Suitable eye protection: Tightly sealed safety glasses.

DIN EN 166

**Hand protection**

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min

Thickness of the glove material 0,45 mm

DIN EN 374

**Skin protection**

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

**Respiratory protection**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

When exceeding the relevant workplace exposure limits, note the following:

Suitable respiratory protective equipment: Combination filter device (DIN EN 141)..

Filtering device with filter or ventilator filtering device of type: A

Observe the wear time limits as specified by the manufacturer.

Observe legal regulations and provisions.

**Environmental exposure controls**

Observe legal regulations and provisions.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	brown
Odour:	characteristic

**Test method**

pH-Value (at 20 °C): No information available.

**Changes in the physical state**



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Melting point:	No information available.
Initial boiling point and boiling range:	200 °C
Flash point:	> 150 °C
Lower explosion limits:	No information available.
Upper explosion limits:	No information available.
Vapour pressure:	No information available.
Density (at 20 °C):	0,882 g/cm <sup>3</sup> DIN 51757
Partition coefficient:	No information available.
Viscosity / dynamic:	No information available. DIN 53019-1
Viscosity / kinematic: (at 40 °C)	135 mm <sup>2</sup> /s DIN EN ISO 3104
Flow time:	No information available.
Vapour density:	No information available.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No known hazardous reactions.

**10.2. Chemical stability**

The product is stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No hazardous reaction when handled and stored according to provisions.

**10.4. Conditions to avoid**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharges.

**10.5. Incompatible materials**

Oxidizing agents. Pyrophoric or self-heating substances.

**10.6. Hazardous decomposition products**

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO<sub>2</sub>, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

**Further information**

Do not mix with other chemicals.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

**Acute toxicity**

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



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CAS No	Chemical name			
	Exposure route	Dose	Species	Source
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic			
	oral	LD50 >5000 mg/kg	Rat	
	dermal	LD50 >5000 mg/kg	Rabbit	
36878-20-3	bis(nonylphenyl)amine			
	oral	LD50 >5000 mg/kg	Rat	
	dermal	LD50 >5000 mg/kg	Rat	
68937-41-7	Propylated triphenyl phosphate			
	oral	LD50 2530 - 5000 mg/kg	Rat	
	dermal	LD50 > 2000 mg/kg	Rabbit	
	inhalative (1 h) aerosol	LC50 > 200 mg/l	Rat	
121158-58-5	Phenol, dodecyl-, branched			
	oral	LD50 2200 mg/kg	Rat	
	dermal	LD50 >2000 mg/kg	Rabbit	

**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.

No indications of human carcinogenicity exist.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

**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.

**Aspiration hazard**

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

**Specific effects in experiment on an animal**

No information available.

**SECTION 12: Ecological information**

**12.1. Toxicity**

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



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CAS No	Chemical name				
	Aquatic toxicity	Dose	[h]   [d]	Species	Source
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic				
	Acute fish toxicity	LC50 >1000 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50 >1000 mg/l	72 h	Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna (Big water flea)	
36878-20-3	bis(nonylphenyl)amine				
	Acute fish toxicity	LC50 >100 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50 >600 mg/l	72 h	Selenastrum capricornutum	
	Acute crustacea toxicity	EC50 >100 mg/l	48 h	Daphnia magna	
68937-41-7	Propylated triphenyl phosphate				
	Acute fish toxicity	LC50 0,36 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50 1000 mg/l	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50 1 mg/l	48 h	Daphnia magna	
121158-58-5	Phenol, dodecyl-, branched				
	Acute fish toxicity	LC50 24 mg/l	96 h	Pimephales promelas (fathead minnow)	
	Acute algae toxicity	ErC50 0,765 mg/l	72 h	Algae	
	Acute crustacea toxicity	EC50 0,037 mg/l	48 h	Daphnia magna (Big water flea)	

**12.2. Persistence and degradability**

There are no data available on the mixture itself. AOX (mg/l): 0

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

This substance does not meet the criteria for classification as PBT or vPvB.

**12.6. Other adverse effects**

No information available.

**Further information**

Do not allow to enter into surface water or drains.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

130206 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils  
Classified as hazardous waste.



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**Waste disposal number of used product**

130206 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils  
Classified as hazardous waste.

**Waste disposal number of contaminated packaging**

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

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

**Inland waterways transport (ADN)**

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

**Marine transport (IMDG)**

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

Marine pollutant: no

**Air transport (ICAO)**

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

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information**

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

**EU regulatory information**





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Restrictions on use (REACH, annex XVII):

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

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

**Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]:

Calculation method.

**National regulatory information**

Water contaminating class (D): 1 - slightly water contaminating

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 2,4,5,6,7,8,10,11,15.

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level

WEL (UK): Workplace Exposure Limits

TWA (EC): Time-Weighted Average

ATE: Acute Toxicity Estimate

STEL (EC) Short Term Exposure Limit

LC50: Lethal Concentration

EC50: half maximal Effective Concentration

ErC50: means EC50 in terms of reduction of growth rate

**Relevant H and EUH statements (number and full text)**

- |        |  |
|--------|--|
| H304   | May be fatal if swallowed and enters airways.                            |
| H315   | Causes skin irritation.  |
| H319   | Causes serious eye irritation.   |
| H361   | Suspected of damaging fertility or the unborn child.                     |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| H373   | May cause damage to organs 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.                         |
| H412   | Harmful to aquatic life with long lasting effects.                       |
| H413   | May cause long lasting harmful effects to aquatic life.                  |

**Further Information**

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.



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