



according to Regulation (EC) No 1907/2006

## 901 Liquid Grease Flow MP90100400AB

Print date: 06.10.2017

Product code: 1101543

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

#### **1.1. Product identifier**

901 Liquid Grease Flow MP90100400AB

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

##### **Use of the substance/mixture**

lubricant

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

##### **Manufacturer**

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

##### **Supplier**

Company name: TUNAP UK Limited  
Street: Unit L4 Deacon Trading Estate, Morley Road  
Place: GB Tonbridge, Kent. TN9 1RA  
Telephone: +44 (0)1732 365163  
e-mail: [sdb@tunap.com](mailto:sdb@tunap.com)  
Internet: [www.tunap.co.uk](http://www.tunap.co.uk)

#### **1.4. Emergency telephone number:** 111 NHS (National Health Service)

### SECTION 2: Hazards identification

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

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

Hazard categories:  
Aerosol: Aerosol 1  
Respiratory or skin sensitisation: Skin Sens. 1B  
Hazard Statements:  
Extremely flammable aerosol.  
Pressurised container: May burst if heated.  
May cause an allergic skin reaction.

#### **2.2. Label elements**

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

##### **Hazard components for labelling**

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts  
Sulfonic acids, petroleum, calcium salts  
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts

**Signal word:** Danger

##### **Pictograms:**



##### **Hazard statements**

H222      Extremely flammable aerosol.



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H229 Pressurised container: May burst if heated.  
H317 May cause an allergic skin reaction.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn, even after use.  
P260 Do not breathe Aerosol.  
P280 Wear protective gloves.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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

**3.2. Mixtures**

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
75-28-5	isobutane			50 - < 100 %
	200-857-2	601-004-00-0	01-2119485395-27	
	Flam. Gas 1, Liquefied gas; H220 H280			
68037-01-4	Dec-1-ene, homopolymer, hydrogenated			10 - < 20 %
	500-183-1		01-2119486452-34	
	Asp. Tox. 1; H304			
74-98-6	propane			5 - < 10 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1, Liquefied gas; H220 H280			
106-97-8	butane			1 - < 3 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1, Liquefied gas; H220 H280			
68584-23-6	Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts			0.1 - < 1 %
	271-529-4			
	Skin Sens. 1B; H317			
61789-86-4	Sulfonic acids, petroleum, calcium salts			0.1 - < 1 %
	263-093-9			
	Skin Sens. 1B; H317			
70024-69-0	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts			0.1 - < 1 %
	274-263-7		01-2119492616-28	
	Skin Sens. 1B; H317			

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

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**



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**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 (CO<sub>2</sub>). Extinguishing powder.

**Unsuitable extinguishing media**

High power water jet.

**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.

**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 articles and floor according to the environmental legislation.

**6.4. Reference to other sections**

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



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**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**

Store in a cool dry place. Observe legal regulations and provisions.

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

No information available.

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

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

**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**

**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Protective and hygiene measures**

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



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**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: AX  
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: Aerosol  
Colour: beige  
Odour: mild

pH-Value (at 20 °C): No information available. **Test method** DIN 19268

**Changes in the physical state**

Melting point: not determined  
Initial boiling point and boiling range: -42 °C  
Flash point: -80 °C ISO 3679

**Flammability**

Solid: not applicable  
Gas: not applicable

Lower explosion limits: 1,5  
Upper explosion limits: 9,4

**Auto-ignition temperature**

Solid: not applicable  
Gas: not applicable  
Decomposition temperature: not determined

**Oxidizing properties**

Not oxidising.  
Vapour pressure: not determined

Density (at 20 °C): 0,855 g/cm<sup>3</sup> DIN 51757



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Water solubility: The study does not need to be conducted because the substance is known to be insoluble in water

**Solubility in other solvents**

not determined

Partition coefficient: not determined

Viscosity / dynamic: No information available. DIN 53019-1

Viscosity / kinematic: > 20,5 mm<sup>2</sup>/s DIN EN ISO 3104  
(at 40 °C)

Flow time: No information available. DIN EN ISO 2431  
(at 20 °C)

Vapour density: not determined

Evaporation rate: not determined

**9.2. Other information**

Solid content: not determined

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Extremely flammable aerosol. No hazardous reaction when handled and stored according to provisions.

**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
68037-01-4	Dec-1-ene, homopolymer, hydrogenated			
	oral	LD50 > 5000 mg/kg	Rat	
	dermal	LD50 > 2000 mg/kg	Rabbit	
	inhalative (4 h) aerosol	LC50 > 5,2 mg/l	Rat	
106-97-8	butane			
	inhalative (4 h) gas	LC50 658 ppm	Rat	GESTIS
68584-23-6	Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts			
	oral	LD50 >5000 mg/kg	Rat	
	dermal	LD50 >5000 mg/kg	Rat	
	inhalative (4 h) aerosol	LC50 >5 mg/l	Rat	
61789-86-4	Sulfonic acids, petroleum, calcium salts			
	oral	LD50 >16000 mg/kg	Rat	
	dermal	LD50 >4000 mg/kg	Rabbit	
70024-69-0	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts			
	oral	LD50 >10000 mg/kg	Rat	
	dermal	LD50 >2000 mg/kg	Rabbit	
	inhalative (4 h) aerosol	LC50 >5 mg/l	Rat	

**Irritation and corrosivity**

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

**Sensitising effects**

May cause an allergic skin reaction. (Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts; Sulfonic acids, petroleum, calcium salts; Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts)

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

No indication of human carcinogenicity.

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.

**Additional information on tests**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**SECTION 12: Ecological information**

**12.1. Toxicity**

The product is not: Ecotoxic.



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CAS No	Chemical name				
	Aquatic toxicity	Dose	[h]   [d]	Species	Source
68037-01-4	Dec-1-ene, homopolymer, hydrogenated				
	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	
68584-23-6	Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts				
	Acute fish toxicity	LC50 >10000 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50 >1000 mg/l	96 h	Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna	
70024-69-0	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts				
	Acute fish toxicity	LC50 >10000 mg/l	96 h	Cyprinus carpio (Common Carp)	
	Acute algae toxicity	ErC50 >1000 mg/l	96 h	Selenastrum capricornutum	
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna (Big water flea)	

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
75-28-5	isobutane	2,8
74-98-6	propane	2,36
106-97-8	butane	2,89

**12.4. Mobility in soil**

The product has not been tested.

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

The product has not been tested.

**12.6. Other adverse effects**

No information available.

**Further information**

Avoid release to the environment.

**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.

**Contaminated packaging**

Water (with cleaning agent). Completely emptied packages can be recycled.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:**

UN 1950





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**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.1  
Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
Excepted quantity: E0  
Transport category: 2  
Tunnel restriction code: D

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.1  
Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
Excepted quantity: E0

**Marine transport (IMDG)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2, see SP63  
Marine pollutant: no  
Special Provisions: 63, 190, 277, 327, 344, 959  
Limited quantity: See SP277  
Excepted quantity: E0  
EmS: F-D, S-U

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS, flammable  
**14.3. Transport hazard class(es):** 2.1  
**14.4. Packing group:** -  
Hazard label: 2.1  
Special Provisions: A145 A167 A802  
Limited quantity Passenger: 30 kg G  
Passenger LQ: Y203  
Excepted quantity: E0  
IATA-packing instructions - Passenger: 203  
IATA-max. quantity - Passenger: 75 kg  
IATA-packing instructions - Cargo: 203  
IATA-max. quantity - Cargo: 150 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no



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**14.6. Special precautions for user**

Warning: Flammable gases.

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

not applicable

**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.

**Additional information**

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

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

Calculation method.

**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

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 2,4,5,6,7,8,10,11,13,15,16.

**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)**

H220 Extremely flammable gas.

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H280 Contains gas under pressure; may explode if heated.



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H304                      May be fatal if swallowed and enters airways.  
H317                      May cause an allergic skin reaction.

**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.)*