

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## EMKA Engine Flush

Revision date: 13.12.2022

Product code: 8910001

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

#### 1.1. Product identifier

EMKA Engine Flush

UFI: DHX0-F9G3-U00P-Q35V

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

##### Use of the substance/mixture

cleaning liquid for the engine oil system

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

Company name: EMKA Schmiertechnik GmbH  
Street: Schmalbachstraße 19  
Location: D-74626 Bretzfeld-Schwabbach  
Country: Germany  
Telephone: +49 7946 944700  
E-Mail: info@emka-oil.de  
Web: www.emka-oil.de

#### 1.4. Emergency telephone: +49 551 19240 (24h)

### SECTION 2: Hazards identification

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

Regulation (EC) No 1272/2008

Asp. Tox. 1; H304

Full text of hazard statements: see SECTION 16.

#### 2.2. Label elements

Regulation (EC) No 1272/2008

##### Hazard components for labelling

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Signal word: Danger

Pictograms:



##### Hazard statements

H304 May be fatal if swallowed and enters airways.

##### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P331 Do NOT induce vomiting.  
P405 Store locked up.  
P501 Dispose of this material and its container to hazardous or special waste collection point.

##### Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

#### 2.3. Other hazards

No information available.

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### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics			80 - < 100 %
	918-481-9		01-2119457273-39	
	Asp. Tox. 1; H304 EUH066			
10254-57-6	4,4'-methylene bis(dibutyldithiocarbamate)			1 - < 10 %
	233-593-1			
	Aquatic Chronic 4; H413			
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic			1 - < 10 %
	265-158-7		01-2119487077-29	
	Asp. Tox. 1; H304			

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

##### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity	
	Specific Conc. Limits, M-factors and ATE			
64742-48-9	918-481-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	80 - < 100 %	
	inhalation: LC50 = >5 mg/l (dusts or mists); dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg			
10254-57-6	233-593-1	4,4'-methylene bis(dibutyldithiocarbamate)	1 - < 10 %	
	dermal: LD50 = >2000 mg/kg; oral: LD50 = >16000 mg/kg			

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Remove casualty to fresh air and keep warm and at rest.

##### After inhalation

Provide fresh air.

When in doubt or if symptoms are observed, get medical advice.

##### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

##### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

##### After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary. Do NOT induce vomiting.

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

Dizziness Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation). Causes eye irritation. Harmful: may cause lung damage if swallowed.

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

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Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### **Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder. In case of fire, use sand, extinguishing powder or alcohol resistant foam.

##### **Unsuitable extinguishing media**

Water. Full water jet

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

Flammable. Vapours can form explosive mixtures with air. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

#### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. 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

##### **General advice**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

#### 6.3. Methods and material for containment and cleaning up

##### **Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### 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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. The substance should only be handled in closed apparatus or systems. Vapours/aerosols must be exhausted directly at the point of origin. Avoid contact with eyes and skin.

##### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air. Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking.

##### **Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

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Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid contact with eyes and skin.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed in a cool, well-ventilated place.

#### Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

#### Further information on storage conditions

Keep away from heat.

### 7.3. Specific end use(s)

Reinigungsflüssigkeit für Motorinnenreinigung

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Additional advice on limit values

To date, no national critical limit values exist.

### 8.2. Exposure controls



#### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear eye/face protection.

##### Hand protection

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. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

##### Skin protection

Wear suitable protective clothing.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	light yellow
Odour:	characteristic

Melting point/freezing point:

Test method  
not determined

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Boiling point or initial boiling point and boiling range:	150-230 °C
Flammability	
Solid/liquid:	not determined
Gas:	not determined
Lower explosion limits:	0,6 vol. %
Upper explosion limits:	7 vol. %
Flash point:	67 °C ISO 3679
Auto-ignition temperature:	approx. 240 °C
Decomposition temperature:	not determined
Viscosity / kinematic: (at 40 °C)	1,7 mm <sup>2</sup> /s DIN EN ISO 3104
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.
Solubility in other solvents	
Organische Lösemittel	
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	ca. 0,6 hPa
Density:	0,80 g/cm <sup>3</sup>

### 9.2. Other information

#### Information with regard to physical hazard classes

Oxidizing properties

Not oxidising.

Sublimation point:

not applicable

Softening point:

not applicable

Pour point:

not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable,

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

### 10.5. Incompatible materials

Oxidising agent Alkali (lye), concentrated; Acid, concentrated

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### 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	Method
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 >5000 mg/kg	Rat	OECD 401	
	dermal	LD50 >5000 mg/kg	Rabbit	OECD 402	
	inhalation (4 h) dust/mist	LC50 >5 mg/l	Rat	OECD 403	
10254-57-6	4,4'-methylene bis(dibutylthiocarbamate)				
	oral	LD50 >16000 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.

### STOT-single exposure

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

### STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

### Aspiration hazard

May be fatal if swallowed and enters airways.

### Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics					
	Acute fish toxicity	LC50 1000 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 1000 mg/l	72 h	Pseudokirchneriella subcapitata		
	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.

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CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics		80%	28	

### 12.3. Bioaccumulative potential

The product has not been tested.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	4,2-7,2

### 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The product has not been tested.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

No information available.

### Further information

Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

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

#### List of Wastes Code - residues/unused products

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

#### List of Wastes Code - used product

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils; hazardous waste

#### Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

### Land transport (ADR/RID)

#### 14.1. UN number or ID number:

No dangerous good in sense of this transport regulation.

#### 14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

#### 14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

#### 14.4. Packing group:

No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN)

#### 14.1. UN number or ID number:

UN 9003

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<b>14.2. UN proper shipping name:</b>	SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C AND NOT MORE THAN 100 °C
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	-
Hazard label:	-
Classification code:	M12

### Marine transport (IMDG)

<b>14.1. UN number or ID 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.

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

<b>14.1. UN number or ID 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 information available.

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

## SECTION 15: Regulatory information

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

#### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28

#### Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC  
Regulation (EC) No. 648/2004 [Detergents regulation]:  
Contains: >30% Hydrocarbons, aliphatic

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 1 - slightly hazardous to water

#### Additional information

Regulation (EC) No. 648/2004 [Detergents regulation]  
Contains: >30% aliphatic hydrocarbons

### 15.2. Chemical safety assessment

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

## SECTION 16: Other information

### 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)  
IMDG: International Maritime Code for Dangerous Goods

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IATA: International Air Transport Association

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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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

Classification	Classification procedure
Asp. Tox. 1; H304	Calculation method

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

- H304 May be fatal if swallowed and enters airways.  
H413 May cause long lasting harmful effects to aquatic life.  
EUH066 Repeated exposure may cause skin dryness or cracking.

### 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.

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