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

1.1. Product identifier

Calibration Fluid

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

Use of the substance/mixture

Calibration fluid

1.3. Details of the supplier of the safety data sheet

Company name:	Robert Bosch GmbH Automotive Aftermarket
Place:	D-76227 Karlsruhe
Telephone:	+49 721-942-0
Responsible Department:	Responsible for the safety data sheet: sds@gbk-ingelheim.de
1.4. Emergency telephone number:	INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a) England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24 24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture according to 1272/2008/EC

Hazard categories:
Aspiration hazard: Asp. Tox. 1
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
May be fatal if swallowed and enters airways.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard components for labelling

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2% - 30%)
Distillates (petroleum)

Signal word: Danger

Pictograms:

Hazard statements

H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P501	Dispose of contents/container to in accordance with local and national regulations.

Special labelling of certain mixtures

EUH066	Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

High risk of slipping due to leakage/spillage of product.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture containing following substances with additives

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
	Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2% - 30%)			< 90 %
	920-360-0		01-2119448343-41	
	Asp. Tox. 1; H304 EUH066			
64742-46-7	Distillates (petroleum)			< 10 %
	265-148-2	649-221-00-X	01-2119489867-12	
	Acute Tox. 4, Skin Irrit. 2, Asp. Tox. 1, Aquatic Chronic 2; H332 H315 H304 H411			
68425-15-0	Polysulfides, di-tert-dodecyl			< 5 %
	270-335-7		01-2119540516-41	
	Aquatic Chronic 4; H413			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Remove contaminated soaked clothing immediately.

After inhalation
Ensure of fresh air.
If patient is not breathing, apply artificial respiration.
Call a physician immediately.

After contact with skin
In case of contact with skin wash off with soap and water.
Consult a doctor if skin irritation persists.

After contact with eyes
Remove contact lens.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.

After ingestion
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.
Never give anything by mouth to an unconscious person.
Seek medical treatment immediately.

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

May be fatal if swallowed and enters airways.
Repeated exposure may cause skin dryness or cracking.
Contact with eyes may cause irritation.

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

Treat symptoms.
Continue to monitor for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Foam, carbon dioxide (CO2), dry chemical, water-spray.
Sand

Unsuitable extinguishing media
Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce:
Carbon monoxide, carbon dioxide, sulphur oxides and nitrogen oxides (NOx).

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.
In case of fire and/or explosion do not breathe fumes.

Additional information

Cool containers at risk with water spray jet.
Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Use personal protective clothing.
High risk of slipping due to leakage/spillage of product.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Shovel into suitable container for disposal.
Contaminated objects and floor clean thoroughly by consideration of environment regulations.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).
Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use personal protective clothing.
Avoid formation of oil dust.
Avoid contact with skin, eyes and clothing.
Ensure adequate ventilation.
When using do not eat, drink or smoke.

Advice on protection against fire and explosion

No special protective measures against fire required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.

Advice on storage compatibility

Incompatible with oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Calibration fluid

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and after work.
Cloths contaminated with product should not be kept in trouser pockets.

Take off immediately all contaminated clothing.
Avoid contact with skin, eyes and clothing.
When using do not eat, drink or smoke.
Use barrier skin cream.

Eye/face protection
Tightly fitting goggles (EN 166).

Hand protection
Protective gloves resistant to chemicals made off natural-rubber latex, minimum coat thickness 0.6 mm, permeation resistance (wear duration) approx. 240 minutes, i.e. protective glove <Lapren 706> made by www.kcl.de.
Glove material must be impermeable and resistant against product / substance / preparation. Gloves material should comply with breakthrough times, permeation rates, and degradation.
Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Respiratory protection
No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	clear
Odour:	Characteristic

Changes in the physical state

Pourpoint:	- 42 °C	DIN ISO 3016
Flash point:	104 °C	DIN EN ISO 2719
Explosive properties	The product is not explosive.	
Lower explosion limits:	n.d.	
Upper explosion limits:	n.d.	
Ignition temperature:	n.d.	
Vapour pressure: (at 20 °C)	n.d.	
Density (at 15 °C):	0,826 g/cm³	DIN 51757
Water solubility:	Immiscible	
Viscosity / kinematic: (at 40 °C)	2,5 mm²/s	DIN EN ISO 3104

9.2. Other information
No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No decomposition if used as directed.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Reactions with oxidizing agents.

10.4. Conditions to avoid
To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials
Oxidizing agents (strong).

10.6. Hazardous decomposition products
Fire may produce:
Carbon monoxide, carbon dioxide, sulphur oxides, and nitrogen oxides (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
Based on available data, the classification criteria are not met.
Toxikologische Daten liegen keine vor.
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2% - 30%)
LD50/oral > 4100 mg/kg
LD50/dermal > 2000 mg/kg
LC50/inhalation: > 5,28 mg/l/4 h

Distillates (petroleum)
LD50/oral > 5000 mg/kg
LD50/dermal > 2000 mg/kg
LC50/inhalation: > 1,72 mg/l/4 h

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.

STOT-single exposure
Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure
Repeated exposure may cause skin dryness or cracking.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

Aspiration hazard
May be fatal if swallowed and enters airways. (Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2% - 30%); Distillates (petroleum))

Additional information on tests
Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Practical experience

Other observations
Contact with eyes may cause irritation.
Frequent persistent contact with the skin may cause skin irritation.

SECTION 12: Ecological information

12.1. Toxicity
Ecological data are not available.
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2% - 30%)
LC50/Fish/96 h > 1000 mg/l
EC50/Daphnia magna/48 h > 1000 mg/l
NOEC/Fish/21 d > 5000 mg/l
NOEC/Daphnia magna/21 d > 1400 mg/l

12.2. Persistence and degradability
The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

12.3. Bioaccumulative potential
There is no indication of bioaccumulation potential.

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects
Hazardous water pollutant.

Further information
Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal
Can be incinerated, when in compliance with local regulations.

Waste disposal number of waste from residues/unused products

130110	OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste hydraulic oils; mineral based non-chlorinated hydraulic oils; hazardous waste

Waste disposal number of contaminated packaging

150110	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging
Empty containers should be taken for local recycling, recovery or waste disposal.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

Land transport (ADR/RID); Marine transport (IMDG); Air transport (ICAO-TI/IATA-DGR); Inland waterways transport (ADN):

14.1. UN number:
No hazardous material as defined by the transport regulations.
14.2. UN proper shipping name:
No hazardous material as defined by the transport regulations.
14.3. Transport hazard class(es):
No hazardous material as defined by the transport regulations.
14.4. Packing group:
No hazardous material as defined by the transport regulations.
14.5. Environmental hazards
No hazardous material as defined by the transport regulations.
14.6. Special precautions for user
No hazardous material as defined by the transport regulations.
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No hazardous material as defined by the transport regulations.

SECTION 15: Regulatory information

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

EU regulatory information

2004/42/EC (VOC):	0 %

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils 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 contaminating class (D):	2 - water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
IMDG = International Maritime Code for Dangerous Goods
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
MARPOL = International Convention for the Prevention of Pollution from Ships
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
CAS = Chemical Abstract Service
EN = European norm
ISO = International Organization for Standardization
DIN = Deutsche Industrie Norm
PBT = Persistent Bioaccumulative and Toxic
vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H332	Harmful if inhaled.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.
The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.
The delivery specifications are contained in the corresponding product sheet.
This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.
(n.a. = not applicable; n.d. = not determined)

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