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

1.1 Product identifier
Product name: **Textar Brake cleaner**
Article number: **96000100, 96000200**

1.2 Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/ mixture: Cleaner

1.3 Details of the supplier of the safety data sheet:
TMD Friction Services GmbH
Schlebuscher Str. 99
51381 Leverkusen / Germany
www.tmdfriction.com
E-mail: serviceline@tmdfriction.com
Kontakt: Tel. +49 (2171)703 2905

1.4 Emergency telephone number
Informationszentrale gegen Vergiftungen,
Universitätsklinikum Bonn
Adenauerallee 119
D-53113 Bonn
Tel: +49 (0)228-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Product definition: **Mixture**
Classification according to Regulation (EG) No. 1272/2008 [CLP/GHS]
Hazard categories:
Aerosol: Aerosol 1
Skin corrosion/irritation: Skin Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes skin irritation.
May cause drowsiness or dizziness.
Toxic to aquatic life with long lasting effects

2.2 Label elements
Hazard components for labelling
Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, < 5% n-hexane
Gefahrenpiktogramme:

Signal word: Danger

Hazard statements:
H222 – Extremely flammable aerosol
H229 – Pressurised container: May burst if heated
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements

Prevention:
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/protective clothing/eye protection/face protection

Reaktion:
P302+P352 - IF ON SKIN: Wash with plenty of water.
P314 - Get medical advice/attention if you feel unwell

Storage:
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3 Other hazards

Other hazards which do not result in classification
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 3: Composition / Information on ingredients

Stoff/Gemisch: Mixtures.

Chemical name	EC-Nr.	CAS-Nr.	Registration No.	%	Classification (EC) Nr. 1272/2008 [CLP]
Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, < 5% n-hexane	921-024-6	64742-49-0	01-2119475514-35	50 - < 100	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411
carbon dioxide	204-696-9	124-38-9		3 - < 5	
n-hexane	203-777-6	110-54-3	Index No 601-037-00-0	1 - < 3	Flam. Liq. 2, Repr. 2, Asp. Tox. 1, STOT RE 2, Skin Irrit. 2, STOT SE 3, Aquatic Chronic 2; H225 H361f *** H304 H373 ** H315 H336 H411

Full text of H and EUH statements: see section 16.
Labelling for contents according to Regulation (EC) No 648/2004
>= 30 % aliphatic hydrocarbons.

SECTION 4: First aid measures

4.1 Description of first aid measures

General Advice:
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

Eye contact:	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.
Skin contact:	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.
Inhalation:	Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.
Ingestion:	Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

4.2 Most important symptoms and effect, both acute and delayed

Headache, nausea, dizziness, fatigue, skin irritation

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:	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

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	Incomplete combustion and thermolysis gases of different toxicity can occur . In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

5.3 Advice for firefighters

Special protective equipment for fire-fighters:	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. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains orsurface 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 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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures: 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).

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking. Heating causes rise in pressure with risk of bursting.

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 feeding stuffs.

Further information on storage conditions
Protect from frost. Protect against direct sunlight. Store in a cool dry place. Observe legal regulations and provisions.

7.3 Specific end use(s)

Recommendations No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limits (EH40):

CAS-Nr.	Substance	ppm	mg/m³	fibres/m³	Category	Origin
124-38-9	Carbon dioxide	5000	9100		TWA (8 h)	WEL
		15000	27400		STEL (15 min)	WEL
110-54-3	n-Hexane	20	72		TWA (8 h)	WEL
		-	-		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. Do not breathe gas/fumes/vapour/spray
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: 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

Appearance:

		Test method
Colour and odour	Colourless, solvent like	
pH-Value (at 20°C)	Not determined	DIN 19268
Melting point	Not determined	
Initial boiling point and boiling range	88°C	
Sublimation point	No information available	

Softening point	No information available	
Flash point	-12°C	
Flammability		
Solid	Not applicable	
Gas	Not applicable	
Lower explosion limits	0,6 Vol.-%	
Upper exposion limits	7,2 Vol.-%	
Ignition temperature	No information available	
Auto-ignition temperature		
Solid	Not applicable	
Gas	Not applicable	
Decomposition temperature	Not determined	
Oxidising properties	Not oxidising	
Vapour pressure	Not deremined	
Density (at 20°C)	0,673 g/cm³	DIN 51757
Bulk density	Nicht anwendbar	
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	
Viscosity / kinematic	< 7 mm²/s	
Flow time	No information available	
Vapour density	Not determined	
Evaporation rate	Not determined	
Solvent separation test	No information available	
Solvent content	No information available	

9.2 Other information

Solid content	Not determined

Data apply to technical substance: Relative density, Colour, Odour, Viscosity, pH.

SECTION 10: Stability and reactivity

10.1 Reactivity	Flammable, Ignition hazard
10.2 Chemical stability	The product is stable under normal conditions.
10.3 Possibility of hazardous reactions	Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.
10.4 Conditions to avoid	Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosivemixtures with air. 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, CO2, 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: Toxiciligical information

11.1 Information on toxicological effects

Toxicocinetics, metabolism and distribution No information available.

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

CAS-Nr.	Chemical name			
	Exposure route	Dose	Species	Source
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, < 5% n-hexane			
	oral	LD50 >5000 mg/kg	Rat	
	dermal	LD50 >2000 mg/kg	Rabbit	
	inhalative (4 h) vapour	LD50 >23,3 mg/l	Rat	

Potential acute health effects

Irritation and corrosivity Causes skin irritation.
Serious eye damage/eye irritation: 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 indication of human carcinogenicity.
No indications of human germ cell mutagenicity exist.
No indications of human reproductive toxicity exist.

STOT-single exposure May cause drowsiness or dizziness. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, < 5% n-hexane)

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 Directive 1999/45/EC.

SECTION 12: Ecological information

12.1 Toxicity

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

CAS-Nr.	Chemical name				
	Aquatic toxicity	Dose	[h] [d]	Species	Source
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclic, <5% n-hexane				
	Acute fish toxicity	LC50 >1-10 mg/l	96h	Pimephales promelas	
	Acute algae toxicity	ErC50 >10-100 mg/l	72h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50 >1-10 mg/l	48h	Daphnia magna	

110-54-3	n-hexane				
	Acute fish toxicity	LC50 >1-10 mg/l	96h	Pimephales promelas	Geiger et al 1990

12.2 Persistence and degradability
The product has not been tested

CAS-Nr.	Chemical name				
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclic, <5% n-hexane				
	Method	Value	d	Source	Evaluation
	OECD Guideline 301F	98%	28		Easily biodegradable (concerning to the criteria of the OECD)

12.3 Bioaccumulative potential
The product has not been tested

CAS-Nr.	Chemical name	Log Pow
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclic, <5% n-hexane	3,4-5,2
110-54-3	n-hexane	3,9

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

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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
160504

WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Waste disposal number of used product
160504

WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; 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

SECTION 14: Transport information

	ADR/RID	ADN	IMGD	IATA
14.1 UN-Nummer	UN 1950	UN 1950	UN 1950	UN 1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS (Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, <5% n-hexane)	AEROSOL, flammable
14.3 Transport hazard class (es)	2	2	2.1	2.1
14.4 Packing group	-	-	-	-
Hazard label	2.1	2.1	2.1	2.1
Classification code	5F	5F		
Special Provisions	190 327 344 625	190 327 344 625	63, 190, 277, 327, 344, 959	A145 A167 A802
Limited quantity	1L	1L	1000mL	
Excepted quantity	E0	E0	E0	E0
Transport category	2			
Tunnel restriction code	D			
Marine pollutant			Yes	
EmS			F-D, S-U	
Limited quantity Passenger				30 kg G
Passenger LQ				Y203
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	Yes	Yes	Yes	Yes
Danger releasing substance	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclic, <5% n-hexane			

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/EG 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.

Aerosol directive (75/324/EEC)

National regulatory information	
Employment restrictions	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class	1 – slightly water contaminating
Additional information	94/69/EC (21st ATP). The benzene content of the product is less than 0.1%. It applies the annotation P. Classification and labeling as carcinogenic is not necessary
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)
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
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness
H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Revisions	This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,8,9,10,11,13,14,15,16
Date of issue/ Date of revision	21.08.2017
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Version	2.1

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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.