Safety Data Sheet

according to Regulation (EC) No 1907/2006

Boge 3000 plus

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

1.1. Product identifier

Boge 3000 plus

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

Use of the substance/mixture

Compressor and vacuum pump oil

1.3. Details of the supplier of the safety data sheet

Company name:	BOGE KOMPRESSOREN Otto Boge GmbH & Co. KG	
Street:	Otto-Boge-Straße 1-7	
Place:	33739 Bielefeld	
Telephone:	+49 5206 601-0	Telefax: +49 5206 601-200
E-mail:	info@boge.com	
Internet:	www.boge.com	

1.4. Emergency telephone number:

Emergency telephone number (24h) + 44 1235 239670 (en)

Further Information

Reserved for industrial and professional use.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

The preparation is not dangerous in the sense of Directive 1999/45/EC.

2.2. Label elements

Additional advice on labelling

Signs and symptoms of oil acne/folliculitis may include the development of blackheads and pimples in the exposed areas of the skin. Ingestion may cause nausea, vomiting and/or diarrhea. Signs and symptoms of oil acne/folliculitis may include the development of blackheads and pimples in the exposed areas of the skin. Ingestion may cause nausea, vomiting and/or diarrhea. Contains Alkarylcarbonsäurederivate (Alkarylcarboxylic acid derivatives). May produce an allergic reaction.

2.3. Other hazards

Signs and symptoms of oil acne/folliculitis may include the development of blackheads and pimples in the exposed areas of the skin. Ingestion may cause nausea, vomiting and/or diarrhea.

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
	Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)			86-90 %
	Asp. Tox. 1; H304 EUH066			
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene			2.5 - < 5 %
	270-128-1		01-2119491299-23	
	Repr. 2, Aquatic Chronic 3; H361f H412			

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		
		Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	86-90 %
	inhalation: Data lacking (gases); dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg		
68411-46-1	270-128-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	2.5 - < 5 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		

Further Information

umfasst eine oder mehrere der folgenden CAS-Nummern (REACH-Registrierungsnummern): 64742-53-6 (01-2119480375-34), 64742-54-7 (01-2119484627-25), 64742-55-8 (01-2119487077-29), 64742-56-9 (01-2119480132-48), 64742-65-0 (01-2119471299-27), 68037-01-4 (01-2119486452-34), 72623-86-0 (01-2119474878-16), 72623-87-1 (01-2119474889-13), 8042-47-5 (01-2119487078-27), 848301-69-9 (01-0000020163-82).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Seek medical attention if problems persist. No administration in cases of unconsiousness or cramps. First aider: Pay attention to self-protection!

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Do NOT induce vomiting.

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

Signs and symptoms of oil acne/folliculitis may include the development of blackheads and pimples in the exposed areas of the skin. Ingestion may cause nausea, vomiting and/or diarrhea.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
Water fog. Extinguishing powder. Carbon dioxide. Foam.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products may include: Complex mixture of solid and liquid particles and gases,

including Carbon monoxide may be released in case of incomplete combustion. Unidentified organic and inorganic compounds.

5.3. Advice for firefighters

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

Additional information

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

Wear personal protection equipment. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation. Avoid contact with skin and eyes.

For non-emergency personnel

Special danger of slipping by leaking/spilling product.

For emergency responders

Self-protection of the first aider Remove affected person from the danger area and lay down. Do not leave affected person unattended. Remove all sources of ignition. Use appropriate respiratory protection.

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). Treat the recovered material as prescribed in the section on waste disposal.
Collect in closed containers for disposal.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Clean contaminated articles and floor according to the environmental legislation.
Clean with detergents. Avoid solvent cleaners.

Other information

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.4. Reference to other sections

See protective measures under point 7 and 8.
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid oil mist
Use only in well-ventilated areas.
When using do not eat, drink or smoke.

Further information on handling

Do not breathe mist/vapours/spray.
Chemical resistant safety shoes. High slip hazard because of leaking or spilled product. Do not put any product-impregnated cleaning rags into your trouser pockets.
High slip hazard because of leaking or spilled product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.
Recommended storage temperature: 0-50 °C / / 32 - 122°F

Further information on storage conditions

Protect from sunlight. Store in a well-ventilated place.

7.3. Specific end use(s)

Observe technical data sheet.
Reserved for industrial and professional use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
-	Mineral Oil pure, highly & severely refined (Inhalable)	-	5		TWA (8 h)	

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
	Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)			
,				
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene			
Worker DNEL, long-term		inhalation	systemic	0,31 mg/m³
Worker DNEL, long-term		dermal	systemic	0,44 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,14 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,04 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,04 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	
Freshwater		0,034 mg/l
Marine water		0,00338 mg/l
Freshwater sediment		0,446 mg/kg
Marine sediment		0,0446 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		1,76 mg/kg

8.2. Exposure controls




Individual protection measures, such as personal protective equipment

Hand protection

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove

suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. Protect skin by using skin protective cream. Wash hands before breaks and after work.

Skin protection

Chemical resistant safety shoes. Take off immediately all contaminated clothing. Thorough skin-cleansing after handling the product. Set out skin protection guidelines.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	light brown
Odour:	characteristic

		Test method
Boiling point or initial boiling point and boiling range:	> 280 °C	estimated
Lower explosion limits:	1 vol. %	
Upper explosion limits:	10 vol. %	
Flash point:	230 °C	ISO 2592
Auto-ignition temperature:	>320 °C	
pH-Value:	not applicable	
Viscosity / kinematic: (at 40 °C)	46 mm²/s	DIN EN ISO 3104
Partition coefficient n-octanol/water:	> 6	
Vapour pressure:	< 0,5 hPa	
Density (at 15 °C):	0,868 g/cm³	EN ISO 12185
Relative vapour density:	>1	

9.2. Other information

Other safety characteristics

Pour point:	-30 °C	ISO 3016

Further Information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No known hazardous reactions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Protect against: heat.
Protect from direct sunlight.

10.5. Incompatible materials

The following must be prevented: Oxidizing agents, strong. acid.

10.6. Hazardous decomposition products

Hazardous decomposition products: none

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.
Data apply to the main component.

Acute toxicity

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

ATEmix tested

	Dose	Species	Source
LD50, oral	> 5000 mg/kg	Ratte	
LD50, dermal	> 5000 mg/kg	Kaninchen	

ATEmix calculated

ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
	Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)				
	oral	LD50 >2000 mg/kg	RAT		
	dermal	LD50 >2000 mg/kg	RABBIT		
	inhalation	Data lacking			
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene				
	oral	LD50 > 5000 mg/kg	Rat	ECHA	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	ECHA	

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
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.
(4-Nonylphenoxy)essigsäure: May cause an allergic skin reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: 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

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

Aspiration hazard

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

Additional information on tests

No risks worthy of mention. Practical experience.
The statement is derived from the properties of the single components.
The classification was undertaken in accordance with the calculation method governed by the Preparations Directive (1999/45/EC).

11.2. Information on other hazards

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.

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.
Additional ecotoxicological information The statement is derived form the properties of the components.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene						
	Acute fish toxicity	LC50	> 100 mg/l	96 h	Danio rerio	OECD 203	
	Acute algae toxicity	ErC50	> 100 mg/l	72 h	Desmodesmus subspicatus	OECD 201	
	Acute crustacea toxicity	EC50	51 mg/l	48 h	Daphnia magna	OECD 202	
	Acute bacteria toxicity	EC50	> 100 mg/l ( )		Bacteria	OECD 209	

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene			
	OECD 301 B	1%	28	
	Not easily bio-degradable (according to OECD-criteria).			

12.3. Bioaccumulative potential

log Pow: > 6

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	> 5

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 components in this formulation do not meet the criteria for classification as PBT or vPvB.

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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

List of Wastes Code - residues/unused products

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

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

Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es): No dangerous good in sense of these transport regulations.
14.4. Packing group: No dangerous good in sense of these transport regulations.

Other applicable information (land transport)

Not restricted

Inland waterways transport (ADN)

14.1. UN number or ID number: No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es): No dangerous good in sense of these transport regulations.
14.4. Packing group: No dangerous good in sense of these transport regulations.

Other applicable information (inland waterways transport)

Not restricted
CDNI Abfallübereinkommen: NST 3411 Mineralschmieröle

Marine transport (IMDG)

14.1. UN number or ID number: No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es): No dangerous good in sense of these transport regulations.

Other applicable information (marine transport)

Not restricted

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es): No dangerous good in sense of these transport regulations.

Other applicable information (air transport)

Not restricted

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No
Danger releasing substance: No dangerous good in sense of these transport regulations.

14.6. Special precautions for user

Section 7: Handling and Storage SECTION 8: Exposure controls/personal protection

14.7. Maritime transport in bulk according to IMO instruments

no

SECTION 15: Regulatory information

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

EU regulatory information

Directive 2010/75/EU on industrial emissions:	0,0
Directive 2004/42/EC on VOC in paints and varnishes:	0,0

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,4,5,6,7,8,9,10,11,12,13,14,15,16.

AICS (Australien), DSL (Kanada), IECSC (China), REACH (Europäische Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (Neuseeland), PICCS (Philippinen), TSCA (USA)

Abbreviations and acronyms

Asp. Tox: Aspiration hazard
Repr: Reproductive toxicity
Aquatic Chronic: Chronic aquatic hazard
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern

Relevant H and EUH statements (number and full text)

H304	May be fatal if swallowed and enters airways.
H361f	Suspected of damaging fertility.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.
Abkürzungen und Akronyme siehe Verzeichnis unter http://abk.esdscom.eu

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