

Date: 03.11.2015  
Product: BORPower® Nanoflush motor interior cleaner  
Article no.: 8697745430371

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

### 1.1. Product identifier

Nano Boron engine flush

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

#### Use of the substance/mixture

Nano Bor cleaning agent for engines

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

Supplier	<b>NNT BORPower GmbH</b> Pechhüttenstraße 6, A-2320 Schwechat/Austria	
Manufacturer	<b>NNT Nanotechnologie Bor AR-GE</b> Organize Sanayi Bölgesi-Kirkclareli/Turkey	
Internet	www.borpower.net	
E-Mail	info@borpower.net	
Hotline	Mo-Fr from 09.00 to 17.00	
	Tel.: +43 1 342 852	Fax: +43 1 342 852-52

### 1.4. Emergency telephone number

Austria +43 1 406 43 43 (Gesundheit Österreich GmbH, 24h)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Indications of danger: Xn-Harmful

R phrases: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking.

#### GHS classification

Hazard categories:

Aspiration hazard: Asp. 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

#### Hazardous components which must be listed on the label

Mixture of distillates (petroleum), hydrotreated light and nanostructured hydroboron

Signal word: **Danger**

Pictograms: **GHS07-GHS08-GHS09**



Irritant



Hazardous



Dangerous for the environment

Date: 03.11.2015  
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Article no.: 8697745430371

## Hazard Statements

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

## 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 or doctor/physician.  
P331 Do NOT induce vomiting.  
P405 Store locked up.  
P501 Do not discharge into drains or the environment, dispose to an authorised waste collection point.

## 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### Chemical characterization

Mixture of distillates (petroleum) hydrotreated light and nanostructured hydroboron

### 3.2. Mixtures

#### Hazardous components

EC-No.	Chemical name	Quantity
CAS-No.	Classification	
Index-No.	GHS-Classification	
REACH-No.		
<b>919-164-8</b>	<b>Distillates (petroleum), hydrotreated light</b>	<b>90-95%</b>
64742-82-1	Xn-Harmful R52, R53, R65, R66	
	Asp. Tox. 1, Aquatic Chronic 3; H304, H412, EUH066	
<b>233-136-6</b>	<b>Nanostructured hydroboron</b>	<b>1-5%</b>
10043-11-5	Xi-Irritant, R36, R37	
	Eye Irrit. 2, H304, H315, H319, H332, EUH 066	

Full text of R-, H- and EUH-phrases see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### After inhalation

Move victim to fresh air and put victim at rest and keep warm.  
In case of difficulties of breathing consult physician.  
If victim is at risk of losing consciousness, position and transport on their side.

#### After contact with skin

Take off immediately all contaminated clothing, including underwear and shoes. After contact with skin, wash immediately with plenty of water and soap.

#### After contact with eyes

Remove contact lenses.  
Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.  
Contact a doctor.

#### After ingestion

Let water be drunk in little sips. Consult physician.

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

Frequently or prolonged contact with skin may cause dermal irritation.  
Irritation of eyes: Irritant effect possible.  
After ingestion: Harmful: May cause lung damage if swallowed.

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

Warning about danger of aspiration.

Date: 03.11.2015  
Product: BORPower® Nanoflush motor interior cleaner  
Article no.: 8697745430371

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Extinguishing powder, sand, carbon dioxide (CO<sub>2</sub>), alcohol resistant foam

#### Extinguishing media which must not be used for safety reasons

High power water jet.

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

Formation of decomposition products possible.

In case of fire and/or explosion do not breathe fumes.

### 5.3. Advice for firefighters

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

#### Additional information

Cool endangered container in case of fire.

Beat down gas/vapours/mist with water spray.

Contaminated fire-fighting water must be collected separately.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

In case of fire: Wear a self-contained breathing apparatus and chemical resistant suit.

Keep away from sources of ignition and do not smoke.

Gas/vapours/mist-Do not breathe

### 6.2. Environmental precautions

Do not empty into drains or the aquatic environment.

Beat down gas/vapours/mist with water spray.

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid-or universal binding agents).

Prevent spread over a wide area (e.g. by containment or oil barriers).

### 6.4. Reference to other sections

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.

Avoid contact with skin and eyes.

Follow the advices on the product label and the user manual.

#### Advice on protection against fire and explosion

Keep away from sources of ignition-No smoking. Take precautionary measures against static discharge.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Do not store at temperatures over: 50 ° C.

Keep away from sources of ignition-No smoking.

Take precautionary measures against static discharge.

Packaging Material: Plastic

Storage class: TRGS 510: 3

### 7.3. Specific use(s)

No information available.

Date: 03.11.2015  
 Product: BORPower® Nanoflush motor interior cleaner  
 Article no.: 8697745430371

## 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
64742-82-1	Distillate (petroleum)	100			TWA (8h)	WEL

### 8.2. Exposure controls

#### Protective and hygiene measures

- Take off immediately all contaminated clothing
- Avoid contact with skin and eyes.
- Keep away from food, drink and animal feeding stuffs.
- When using do not eat, drink or smoke.
- Wash hands before breaks and after work.

#### Respiratory protection

In case of accumulation of fumes/aerosols, provide adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

#### Eye/face protection

Wear tightly sealed safety glasses against possible splashes into the eyes. (EN 166)

#### Skin protection

Wear suitable protective clothing according to EN 465.

#### Hand protection

Tested protective gloves are to be worn: NBR (Nitrile rubber). FKM (Fluoroelastomer (Viton)). (EN374)

## SECTION 9: Physical and chemical properties

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

Parameter	Typical Value	Test method
Physical state	liquid	ASTM D97
Color	Cream -colored	ASTM D1500
Odour	characteristic	
Vapour pressure (at 20° C)	>20 hPa	ASTM D6683-01
pH as is	n.a.	
Flash point	66° C	ASTM D92
Melting point	Not determined	
Boiling point	190-220° C	
Lower explosion limits	>0,6 Vol.%	
Upper explosion limits	>7,0 Vol.%	
Evaporation rate	Not determined	
Odour Threshold	Not determined	
Vapour density	Not determined	
Ignition temperature	>200° C	DIN 51794
Density (at 20°C)	0,880 g/ml	ASTM D6683-01
Water solubility	insoluble	ASTM D1401
Viscosity	<8mm <sup>2</sup> /s	
Density (at 20°C)	0,791 g/ml	

### 9.2. Other information

No data

Date: 03.11.2015  
Product: BORPower® Nanoflush motor interior cleaner  
Article no.: 8697745430371

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

### 10.2. Chemical stability

No decomposition when used as intended.

### 10.3. Possibility of hazardous reactions

No dangerous reactions are known.

### 10.4. Conditions to avoid

Only use the material in places where open light, fire and flammable sources can be kept away. No decomposition when used as intended.

### 10.5. Incompatible materials

Oxidizing agents. Acid, concentrated. Alkalis (alkalis), concentrated.

### 10.6. Hazardous decomposition products

No hazardous decomposition products are known.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

CAS-No.	Chemical name	Exposure routes	Method	Dose	Species	Source
64742-82-1	Distillate(petroleum)	Oral	LD50	>5000 mg/kg	Rat	
		Dermal	LD50	>2920 mg/kg	Rabbit	
		Dermal	LD50	1 mg/kg	Rabbit	
10043-11-5	Nanostructured hydroboron	Dermal	LD50	1 mg/kg	Rabbit	

### 11.2. Irritation and corrosivity

After skin contact: Frequently or prolonged contact with skin may cause dermal irritation.

Irritation of eyes: Irritant effect possible. Harmful: May cause lung damage if swallowed.

### 11.3. Sensitising effects

No danger of sensitization.

## SECTION 12: Ecological information

### 12.1. Toxicity

CAS-No.	Chemical name	Aquatic toxicity	Method	Dose	Time	Species	Source
6474282-1	Distillate (petroleum)	Acute fish toxicity	LC50	10-100 mg/l	96h	Oncorhynchus mykiss	
		Acute algae toxicity	ErC50	50-100 mg/l	72h	Pseudokirchneriella subcapitata	
		Acute crustacea toxicity	EC50	10-22 mg/l	48h	Daphnia magna	

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

Swims on the water.

Low potential of bio-accumulation.

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assesment

No information available.

### 12.6. Other adverse effects

No information available.

Date: 03.11.2015  
Product: BORPower® Nanoflush motor interior cleaner  
Article no.: 8697745430371

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Advice on disposal

- Do not dispose with household waste.
- Do not allow to enter into surface water or drains.
- Arrange about the exact waste code with the local waste disposal expert.

#### Contaminated packaging

- Container must be completely emptied.
- Do not pierce, cut up or weld unclean container. (Explosion hazard.)

## SECTION 14: Transport information

### General informationen

This product contains no toxic chemicals (§ 313 of Class III, the SARA of 1986).

### Land transport (ADR/RID)

**14.1. UN number** n.a.

**14.2. UN proper shipping name** n.a.

**14.3. Transport hazard class(es)** n.a.

**14.4. Packing group** n.a.

Hazard label n.a.

Classification code n.a.

Special Provisions n.a.

Limited quantity n.a.

Transport category n.a.

Hazard No. n.a.

Tunnel restriction code n.a.

Not hazardous product according to these transportation regulations

### Inland waterways transport (ADN)

Not hazardous product according to these transportation regulations

### Marine transport (IMDG)

Not hazardous product according to these transportation regulations

### Air transport (ICAO)

Not hazardous product according to these transportation regulations

### 14.5. Environmental hazards

Dangerous for the environment: YES



### 14.6. Special precautions for user

No information available.

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available.

## SECTION 15: Regulatory information

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

#### EU regulatory information

Contains: >30% of distillate (petroleum), aliphatic and 1-5% of nanostructured hydroboron

#### National regulatory information

Water contaminating class (D): 2-water contaminating

### 15.2. Chemical safety assessment

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

Date: 03.11.2015  
Product: BORPower® Nanoflush motor interior cleaner  
Article no.: 8697745430371

## SECTION 16: Other information

### Full text of R phrases (Number and full text)

R20/R21	Harmful by inhalation and contact with skin.
R22	Harmful if swallowed.
R36/R37/R38	Irritating to eyes, respiratory system and skin.
R52	Harmful to aquatic organisms.
R53	May cause long-term adverse effects in the aquatic environment.
R65	Harmful: May cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.

### Full text of H- and EUH-phrases (Number and full text)

H304	May be fatal if swallowed and enters airways.
H362	May cause harm to breast-fed children.
H412	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

### Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

## Legends

ACGIH	American Conference of Gouvernement and Industrial Hygienists
ADR	Accord europeen relatif au Transport international des marchandises Dangereuses par Route (Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße)
AGW	Arbeitsplatzgrenzwert
ARW	Arbeitsplatzrichtwert
Alkoholbest	Alkoholbeständig
Anm.	Anmerkung
allg.	allgemein
AOEL	Acceptable Operator Expo Sure Level
ATE	Acute Toxicity Estimate (Schätzwert Akuter Toxizität gemäß der Verordnung (EG) Nr. 1272/2008 (CLP))
BG	Berufsgenossenschaft
BGV	Berufsgenossenschaftliche Vorschrift
BGW	Biologischer Grenzwert (TRGS 903, BRD)
BGW/VLB	Biologisch grenswaarde/Valerur limite bioiologique (Belgien)
BGW/VGÜ	Biologischer Grenzwert, Verordnung des Bundesministers für Arbeit und Soziales über die Gesundheitsüberwachung am Arbeitsplatz (Österreich)
BOD	Biochemical oxygen demend (biochemischer Sauerstoffbedarf –BSB)
BSEF	Bromine Science and Environmental Forum
Bw	Body weight (Körpergewicht)
bzw.	beziehungsweise
ca.	circa/zirka
CAS	Chemical Abstract Services
CLP	Classification, Labelling and Packaging (Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen)
GefStoffV	Gefahrstoffverordnung
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
JArbSchG	Jugendarbeitsschutzgesetz
LC	Lethal concentration
LD	Lethal dosage
MAK	Maximal workspace concentration
MuSchG	Mutterschutzgesetz
n.a.	Not applicable (nicht anwendbar)
n.g.	nicht geprüft
n.v.	nicht verfügbar
n.d.a.	No data available
n.t.	Not tested

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NOAEL	No Observed Adverse Effect Level (Dosis ohne beobachtete schädigende Wirkung)
NOEC	No Observed Effect Level (Tierexperimentell festgelegte höchste Konzentration, bei der keine Wirkung (schädigender Effekt) mehr nachweisbar ist)
OECD	Organisation for Economic Cooperation and Development (Organisation für wirtschaftliche Zusammenarbeit und Entwicklung)
Org.	organisch
PVC	Polyvinylchlorid
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (Verordnung (EG) Nr. 1907/2006 zur Registrierung, Bewertung, Zulassung und Beschränkung chemischer Stoffe)
TRbF	Technical rules for handling flammable liquids
TVA	Technische Verordnung über Abfälle (Schweiz)
TWA	Time Weighted Average
UEV	Eidgenössisches Department für Umwelt, Verkehr, Energie und Kommunikation (Schweiz)
UN RTDG	United Nations Recommendations on the Transport of Dangerous Goods (die Empfehlungen der Vereinten Nationen für die Beförderung gefährlicher Güter)
UV	Ultraviolett
VbF	Directives for flammable liquids Verordnung über brennbare Flüssigkeiten (Österreichische Verordnung)
VeVA	Verordnung über den Verkehr mit Abfällen (Schweiz)
VOC	Volatile organic compounds (flüchtige organische Verbindung)
vPvB	very persistent and very bioaccumulative (sehr persistent und sehr bioakkumulierbar)
WGK	Water hazard class according to VwVwS (Wassergefährdungsklasse gemäß Verwaltungsvorschrift wassergefährdender Stoffe –VwVwS)
WGK3	severely hazardous to waters (stark wassergefährdend)
WGK2	hazardous to waters (wassergefährdend)
WGK1	low hazardous to waters (schwach wassergefährdend)
VCI	Chemical industry alliance (Verband der Chemischen Industrie e.V)
Wwt	wet weight (Feuchtmasse)
VwVwS	Verwaltungsvorschrift für wassergefährdende Stoffe
z. Zt.	Zu Zeit
z.B.	zum Beispiel

This data sheet was written according to 2001/58/EG and TRGS 220. The information in this data sheet shall describe the product with respect to the required safety aspects. The information is not intended to assure certain product properties. The information was collected to the best of the manufacturer's knowledge. They shall not be modified nor applied to other products. No liability.

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