

Revision date:  
10.05.2019**Zubora 10 H Plus FF****Article No.: 32060**

Page 1 of 10

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

32060 Zubora 10 H Plus FF

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

Water-soluble cooling lubricant

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

Company name:	Zeller+Gmelin GmbH & Co. KG	
Street:	Schlossstr. 20	
Place:	D-73054 Eislingen	
Telephone:	+49 (0) 7161 / 802-0	Telefax: +49 (0) 7161 / 802-290
e-mail:	info@zeller-gmelin.de	
Contact person:	Uwe Allmendinger	Telephone: +49 (0) 7161 / 802-297
e-mail:	produktsicherheit@zeller-gmelin.de	
Internet:	www.zeller-gmelin.de	
Responsible Department:	Produktsicherheit / Product Safety	

**1.4. Emergency telephone number:**Germany: +49 (0) 7161 / 802-400  
In England and Wales: NHS Direct: 0845 4647 or 111 In Scotland: NHS 24 - 08454 24 24 24 In Republic of Ireland: 01 809 2166**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

1,2-benzisothiazol-3(2H)-one

**Signal word:** Warning**Pictograms:****Hazard statements**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

**Precautionary statements**

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Revision date:  
10.05.2019

**Zubora 10 H Plus FF**
**Article No.: 32060**

Page 2 of 10

P337+P313

If eye irritation persists: Get medical advice/attention.

**2.3. Other hazards**

Results of PBT and vPvB assessment: not applicable.

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**
**Chemical characterization**

Mineral oil-based mixture. Mineral oil with DMSO extract &lt; 3 % as measured by IP 346.

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
	ionic mixture of carboxylic acids and alkanolamines			10 - < 20 %
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
68920-66-1	alcohols, C16-18 and C18-unsaturated, ethoxylated (> 5-15 EO)			5 - < 10 %
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
10043-35-3	boric acid			1 - < 2.5 %
	233-139-2	005-007-00-2	01-2119486683-25	
	Repr. 1B; H360FD			
2634-33-5	1,2-benzisothiazol-3(2H)-one			0.1 - < 0.3 %
	220-120-9	613-088-00-6		
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1; H302 H315 H318 H317 H400			
55406-53-6	3-iodo-2-propynyl butylcarbamate			< 0.1 %
	259-627-5	616-212-00-7		
	Acute Tox. 3, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, STOT RE 1, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 1); H331 H302 H318 H317 H372 H400 H410			

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

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**
**General information**

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Remove contaminated, saturated clothing immediately.

**After inhalation**

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

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap.

**After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**After ingestion**

If swallowed, rinse mouth with water (only if the person is conscious). Let water be drunken in little sips (dilution effect). Call a physician immediately. Do NOT induce vomiting.

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

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

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

No information available.

Revision date:  
10.05.2019

**Zubora 10 H Plus FF**

**Article No.: 32060**

Page 3 of 10

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### **Suitable extinguishing media**

alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO<sub>2</sub>).

#### **Unsuitable extinguishing media**

Full water jet.

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

Hazardous decomposition products: Carbon monoxide Carbon dioxide (CO<sub>2</sub>). Do not inhale explosion and combustion gases.

### 5.3. Advice for firefighters

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

#### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not allow to enter into soil/subsoil.

## SECTION 6: Accidental release measures

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

See protective measures under point 7 and 8.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Clean contaminated articles and floor according to the environmental legislation.

### 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). Treat the recovered material as prescribed in the section on waste disposal.

### 6.4. Reference to other sections

See protective measures under point 7 and 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### **Advice on safe handling**

Use personal protection equipment. Do not eat, drink or smoke when using this product. Provide fresh air. Handle and open container with care. Conditions to avoid: generation/formation of aerosols.

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

No special measures are necessary.

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

#### **Requirements for storage rooms and vessels**

Protect against: Frost. Keep away from heat. Protect against direct sunlight. Keep container tightly closed in a cool, well-ventilated place.

### 7.3. Specific end use(s)

Observe technical data sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Revision date:  
10.05.2019

**Zubora 10 H Plus FF**
**Article No.: 32060**

Page 4 of 10

**DNEL/DMEL values**

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
10043-35-3	boric acid		
Worker DNEL, long-term	inhalation	systemic	8,3 mg/m <sup>3</sup>
Consumer DNEL, long-term	inhalation	systemic	4,15 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	392 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	0,98 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,98 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	196 mg/kg bw/day

**PNEC values**

CAS No	Substance	
Environmental compartment	Value	
10043-35-3	boric acid	
Freshwater	1,35 mg/l	
Marine water	1,35 mg/l	
Soil	5,4 mg/kg	
Micro-organisms in sewage treatment plants (STP)	1,75 mg/l	
Freshwater sediment	1,8 mg/kg	
Marine sediment	1,8 mg/kg	

**8.2. Exposure controls**
**Appropriate engineering controls**

See chapter 7. No additional measures necessary.

**Protective and hygiene measures**

When using do not eat, drink, smoke, sniff.

**Eye/face protection**

Eye glasses with side protection.

**Hand protection**

Wear suitable gloves. Recommended glove articles: EN ISO 374. Suitable material: NBR (Nitrile rubber). Breakthrough time (maximum wearing time): > 480 min (Thickness of the glove material: 0.4 mm). Breakthrough times and swelling properties of the material must be taken into consideration. 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. Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

**Skin protection**

Protective clothing.

**Respiratory protection**

With correct and proper use, and under normal conditions, breathing protection is not required. When splashes or fine mist form, a permitted breathing apparatus suitable for these purposes must be used. Suitable respiratory protection apparatus: Filtering Half-face mask (DIN EN 149), e.g. FFA P / FFP3.

**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:	amber
Odour:	characteristic

Revision date:  
10.05.2019**Zubora 10 H Plus FF****Article No.: 32060**

Page 5 of 10

**Test method**

pH-Value (at 20 °C):	9,4	DIN 51369 (50 g/L)
<b>Changes in the physical state</b>		
Melting point:	not determined	
Initial boiling point and boiling range:	not determined	
Pour point:	not determined	
Flash point:	> 100 °C	
Lower explosion limits:	0,6 vol. %	
Upper explosion limits:	6,5 vol. %	
Ignition temperature:	not determined	
Decomposition temperature:	No information available.	
Vapour pressure:	not determined	
Density (at 15 °C):	0,99 g/cm <sup>3</sup>	DIN EN ISO 12185
Water solubility:	miscible	
Partition coefficient:	not determined	
Viscosity / dynamic:	not determined	
Viscosity / kinematic: (at 20 °C)	190 mm <sup>2</sup> /s	ASTM D 7042
Flow time:	not determined	
Vapour density:	not determined	
Evaporation rate:	not determined	

**9.2. Other information**

No information available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No information available.

**10.2. Chemical stability**

No information available.

**10.3. Possibility of hazardous reactions**

No hazardous reaction when handled and stored according to provisions.

**10.4. Conditions to avoid**

Heat.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

No information available.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

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

Revision date:  
10.05.2019

**Zubora 10 H Plus FF**
**Article No.: 32060**

Page 6 of 10

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one				
	oral	LD50 597 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rat		
55406-53-6	3-iodo-2-propynyl butylcarbamate				
	oral	LD50 >300-500 mg/kg	Rat		
	dermal	LD50 >5000 mg/kg	Rat		
	inhalation vapour	ATE 3 mg/l			
	inhalation (4 h) aerosol	LC50 0,67 mg/l			

**Irritation and corrosivity**

Causes skin irritation.

Causes serious eye irritation.

**Sensitising effects**

May cause an allergic skin reaction. (1,2-benzisothiazol-3(2H)-one; 3-iodo-2-propynyl butylcarbamate)

**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**

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

**Aspiration hazard**

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

**Practical experience**
**Other observations**

Keeping to the general worker's protection rules and the industrial hygienics, there is no risk in handling this product through the personnel.

**SECTION 12: Ecological information**
**12.1. Toxicity**

There are no data available on the mixture itself.

Revision date:  
10.05.2019

**Zubora 10 H Plus FF**
**Article No.: 32060**

Page 7 of 10

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one					
	Acute fish toxicity	LC50 mg/l	0,74	96 h		
	Acute crustacea toxicity	EC50 mg/l	2,44	48 h	Daphnia magna (Big water flea)	
55406-53-6	3-iodo-2-propynyl butylcarbamate					
	Acute fish toxicity	LC50 mg/l	0,067	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203
	Acute algae toxicity	ErC50 mg/l	0,022	72 h	Scenedesmus subspicatus	OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,16	48 h	Daphnia magna (Big water flea)	OECD 202
	Fish toxicity	NOEC mg/l	0,0084	35 d		
	Algae toxicity	NOEC mg/l	0,0046	72 d		
	Crustacea toxicity	NOEC mg/l	0,05	21 d		

**12.2. Persistence and degradability**

There are no data available on the mixture itself.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
68920-66-1	alcohols, C16-18 and C18-unsaturated, ethoxylated (> 5-15 EO)				
	Biodegradation	73,0 %			
	Readily biodegradable (according to OECD criteria).				
	Chemical oxygen demand (COD)	2470 mg/g			

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
68920-66-1	alcohols, C16-18 and C18-unsaturated, ethoxylated (> 5-15 EO)	6,13
10043-35-3	boric acid	-1,09
2634-33-5	1,2-benzisothiazol-3(2H)-one	0,4
55406-53-6	3-iodo-2-propynyl butylcarbamate	2,88

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

No data available

**12.6. Other adverse effects**

No data available

**SECTION 13: Disposal considerations**
**13.1. Waste treatment methods**
**Advice on disposal**

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste.

Revision date:  
10.05.2019**Zubora 10 H Plus FF****Article No.: 32060**

Page 8 of 10

**Waste disposal number of waste from residues/unused products**

120107 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; mineral-based machining oils free of halogens (except emulsions and solutions); hazardous waste

**Waste disposal number of used product**

120109 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; machining emulsions and solutions free of halogens; hazardous waste

**Contaminated packaging**

Non-contaminated packages may be recycled. Consult the appropriate local waste disposal expert about waste disposal.

**SECTION 14: Transport information****Land transport (ADR/RID)**

**14.1. UN 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.

**Marine transport (IMDG)**

**14.1. UN 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.  
Marine pollutant: NO

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

**14.1. UN 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.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

No data available

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No data available

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):  
boric acid

Restrictions on use (REACH, annex XVII):

Entry 30: boric acid

2010/75/EU (VOC): 0 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Water contaminating class (D): 2 - clearly water contaminating



Revision date:  
10.05.2019

**Zubora 10 H Plus FF**
**Article No.: 32060**

Page 9 of 10

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**
**Changes**

This data sheet contains changes from the previous version in section(s): 2,3.

**Abbreviations and acronyms**

ADR: Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 RID: Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulations concerning the International Carriage of Dangerous Goods by Rail)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 ICAO: International Civil Aviation Organization  
 CAS: Chemical Abstracts Service (a division of the American Chemical Society)  
 DNEL/DMEL: Derived No-Effect Level / Derived Minimal Effect Level  
 PNEC: Predicted No Effect Concentration  
 WEL (UK): Workplace Exposure Limits  
 TWA (EC): Time-Weighted Average  
 STEL (EC): Short Term Exposure Limit  
 ATE: Acute Toxicity Estimate  
 LD50: Lethal Dose, 50% (median lethal dose)  
 LC50: Lethal Concentration, 50% (median lethal concentration)  
 EC50: half maximal Effective Concentration  
 ErC50: EC50 in terms of reduction of growth rate  
 AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen  
 VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe

**Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method

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

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H360FD	May damage fertility. May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Further Information**

Safety Data Sheet according to COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

-----  
 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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

Revision date:  
10.05.2019

**Zubora 10 H Plus FF**

**Article No.: 32060**

Page 10 of 10

---

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