



## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

#### SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1. Product identifier

Product name : BAR'S RADIATOR STOP LEAK POWDER  
Product code : RHZ1M20

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

Application : SU21 Consumer product. PC0 Other. Engine maintenance.

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

Supplier : Bar's Products Europe, B.V.  
Westelijk Halfroond 487  
1183 JD Amstelveen, The Netherlands  
Telephone : +31-20-7989301  
Fax : +31-20-798 93 02  
E-mail : Main@barsgroup.com  
Website : www.barseurope.com

##### 1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

NL - Telephone : +31-20-7989301 (During office hours only)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):

National Poisons Information Service +44-844 892 0111 (24/7)

#### SECTION 2 HAZARDS IDENTIFICATION

##### 2.1. Classification of the substance or mixture

CLP classification : Skin irritation, category 2. Eye irritation, category 2. Skin sensitization, category 1.  
(1272/2008/EC)

Human health hazards : Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.  
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives.  
Environmental hazards : Not classified as dangerous according to statutory EC-Directives.

##### 2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



Signal word : Warning

H- and P-phrases : H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P261 dust Avoid breathing dust.



## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

P280 hands eyes	Wear protective gloves and eye protection.
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to an official chemical waste depot.

Labelling of packagings where the contents do not exceed 125 ml:

Hazard pictograms :



Signal word : Warning

H- and P-phrases	:	H317	May cause an allergic skin reaction.
		P101	If medical advice is needed, have product container or label at hand.
		P102	Keep out of reach of children.
		P260 dust	Avoid breathing dust.
		P280 hands eyes	Wear protective gloves and eye protection.
		P302+P352	IF ON SKIN: Wash with plenty of water/soap.
		P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
		P362+P364	Take off contaminated clothing and wash it before reuse.
		P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

- : Contains: 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol .
- : 7 per cent of the mixture consists of component(s) of unknown acute toxicity. Contains 56 % of components with unknown hazards to the aquatic environment.

### 2.3. Other hazards

Other information : Does not contain PBT or vPvB substances.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

### 3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	0,1 - < 1	4719-04-4	225-208-0		
Potassium carbonate	1 - < 5	584-08-7	209-529-3		
Curcumin	5 - < 10	458-37-7	207-280-5		

Substance name	Hazard Class	H-phrases	Pictograms	
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Acute Tox. 4; Acute Tox. 2; Skin Sens. 1; STOT RE 1	H302; H330; H317; H372	GHS06; GHS07; GHS08	H317 : C ≥ 0.1 %

Product name : Bar's Radiator Stop Leak Powder

Date of issue : 02-02-2018

Replaces issue dated : ---

Page 2/10

INFO CARE SDS



## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

Potassium carbonate	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3	H315; H319; H335	GHS07	
Curcumin	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3	H315; H319; H335	GHS07	

Occupational exposure limit(s), if relevant, are listed in section 8.

Reference is made to chapter 16 for full text of each relevant H phrase.

#### SECTION 4 FIRST-AID MEASURES

##### 4.1. Description of first aid measures

First aid measures

- Inhalation : Move victim into fresh air. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation occurs.
- Eye contact : Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

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

Effects and symptoms

- Inhalation : May cause irritation to respiratory airways and coughing.
- Skin contact : Irritant. May cause redness and irritation, sensitisation. May produce an allergic reaction.
- Eye contact : Irritant. May cause redness and pain.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

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

Note to physicians : None known.

#### SECTION 5 FIRE-FIGHTING MEASURES

##### 5.1. Extinguishing media

Extinguishing media

- Suitable : Carbondioxide (CO2). Foam. Dry chemical. Water fog.
- Not suitable : None known.

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

- Special exposure hazards : None known.
- Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

##### 5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

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



## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. Do not breathe dust.

#### 6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water.

Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

#### 6.4. Reference to other sections

Reference to other sections : See also section 8.

## SECTION 7 HANDLING AND STORAGE

#### 7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Avoid contact with skin and eyes.

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

Storage : Keep in a cool, dry and well-ventilated place (< 35 °C).

Recommended packaging : Keep only in the original container.

Non recommended packaging : Steel (except stainless steel).

#### 7.3. Specific end use(s)

Use : Use only as directed.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Workplace exposure limits (mg/m<sup>3</sup>):

Chemical name	Country	TWA 8 hour (mg/m <sup>3</sup> )	STEL 15 min (mg/m <sup>3</sup> )	Comments
Potassium carbonate		0,5	-	

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Inhalation			0,2 mg/m <sup>3</sup>	
Potassium carbonate	Dermal			16 mg/kg bw/day	
	Inhalation			10 mg/m <sup>3</sup>	

Product name : Bar's Radiator Stop Leak Powder

Date of issue : 02-02-2018

Replaces issue dated : ---

Page 4/10

INFO CARE SDS



## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Potassium carbonate	Dermal Inhalation			8 mg/kg bw/day 10 mg/m <sup>3</sup>	

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Water	0,0066 mg/l	0,00066 mg/l	
	Sediment	0,0304 mg/kg	0,00304 mg/kg	
	Intermittent water			0,066 mg/l
	STP			5,5 mg/l
	Soil			0,00219 mg/kg

## 8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals.  
Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.



- Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: neoprene. Indication of permeation breakthrough time: 4 hours.
- Respiratory protection : Take care of sufficient ventilation. Suitable: dust mask type FFP1 or higher, in accordance with EN 149.
- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: neoprene. ± 0,5 mm. Indication of permeation breakthrough time: 4 hours.
- Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance	: Solid.	
Colour	: Brown.	
Odour	: Odourless.	
Odour threshold	: Not applicable.	Odourless.
pH	: 2 - 11,5	10% solution.
Solubility in water	: Dispersible.	
Partition coefficient (n-octanol/water)	: Not known.	
Flash point	: Not relevant.	Solid.
Flammability (solid, gas)	: Not flammable.	Not easily ignitable.
Auto ignition temperature	: Not known.	Does not contain substances with a known auto ignition temperature.
Boiling point/boiling range	: 100 °C	



## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

Melting point/melting range	: 0 °C	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (% in air)	: Not applicable.	
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not applicable.	Solid.
Vapour pressure (20°C)	: Very low.	Solid.
Vapour density (20°C)	: Not applicable.	The solvent content of this product is less than 1%.
Relative density (20°C)	: 1,5 g/ml	
Evaporation rate	: Very low.	Solid.

## SECTION 10 STABILITY AND REACTIVITY

### 10.1. Reactivity

Reactivity : See sub-sections below.

### 10.2. Chemical stability

Stability : Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

### 10.4. Conditions to avoid

Conditions to avoid : See section 7.

### 10.5. Incompatible materials

Materials to avoid : No specific recommendations.

### 10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

## SECTION 11 TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

#### Inhalation

- Acute toxicity : Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: 16 %. ATE: > 5 mg/l. Not classified - based on available data, the classification criteria are not met. No specific effects and/or symptoms are known.
- Corrosion/irritation : May cause irritation to respiratory airways and coughing. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

#### Skin contact



## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

Acute toxicity	: Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: 7 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
Corrosion/irritation	: Irritant. May cause redness.
Sensitisation	: May cause sensitisation by skin contact. May produce an allergic reaction.
Mutagenicity	: Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
Eye contact	
Corrosion/irritation	: Irritant.
Ingestion	
Acute toxicity	: Calculated LD50: > 3308 mg/kg.bw. Ingredients of unknown toxicity: 7 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
Aspiration	: Not classified - based on available data, the classification criteria are not met. Does not contain substances with an aspiration hazard.
Corrosion/irritation	: May cause a feeling of sickness, vomiting and diarrhoea.
Carcinogenicity	: Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
Mutagenicity	: Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
Reprotoxicity	: Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

#### Toxicological information:

Chemical name	Property		Method	Test animal	
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	NOAEL (development, oral)	750 mg/kg bw/d		Rat	
	Genotoxicity - in vivo	Not genotoxic	OECD 486	Rat	
	NOAEL (inhalation)	30 mg/m <sup>3</sup>	OECD 412	Rat	
	NOAEL (oral)	64,1 mg/kg bw/d	OECD 408	Rat	
	Eye irritation	Slightly irritant	OECD 405	Rabbit	
	Skin irritation	Non-irritant	OECD 404	Rabbit	
	LD50 (dermal)	> 4000 mg/kg bw	OECD 402	Rat	
	LC50 (inhalation)	371 mg/m <sup>3</sup>	OECD 403	Rat	
	Skin sensitisation	Sensitizing.	-----	Guinea pig	
	NOEL (carcinogenicity) - estimate	Not carcinogenic	-----	Mouse	
	LD50 (oral)	1000 mg/kg bw	OECD 401	Rat	
	Potassium carbonate	NOAEL (development, oral)	> 180 mg/kg bw/d	OECD 414	Rat
		Skin irritation	Irritant	OECD 404	Rabbit
LD50 (oral)		> 2000 mg/kg bw	OECD 401	Rat	
LC50 (inhalation)		> 3820 mg/m <sup>3</sup>	-----	Rat	
NOEL (carcinogenicity) - estimate		2861 mg/kg.d	Read across	Rat	
NOAEL (oral) - estimate		2667 mg/kg bw/d	Read across	Rat	
Mutagenicity		Negative	OECD 471	Salmonella typhimurium	
Genotoxicity - in vitro		Not genotoxic	OECD 473		
Eye irritation		Irritant	OECD 405	Rabbit	
Skin sensitisation		Not sensitizing	OECD 406	Guinea pig	
LD50 (dermal)		> 2000 mg/kg bw	-----	Rabbit	
Curcumin			> 180 mg/kg bw/d	OECD 414	Rat
		Mutagenicity	Negative	-----	-----



## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

	NOAEL (development, oral)	250 mg/kg bw/d	----	Rat
	NOAEL (oral)	1300 mg/kg bw/d	----	Rat
	LD50 (oral)	> 2000 mg/kg bw	----	----

## SECTION 12 ECOLOGICAL INFORMATION

### 12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Calculated LC50 (fish): 1344 mg/l. Calculated EC50 (waterflea): 2491 mg/l. Contains 56 % of components with unknown hazards to the aquatic environment. Not classified - based on available data, the classification criteria are not met.

### 12.2. Persistence and degradability

Persistence – degradability : No specific information known. The surfactants contained in this preparation do not comply with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents. This product shall not be used in cleaners. Inorganic salt.

### 12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

### 12.4. Mobility in soil

Mobility : Little chance of penetration of spilled product into the ground and surface water.

### 12.5. Results of PBT and vPvB ass

PBT/vPvB assessment : Does not contain PBT or vPvB substances.

### 12.6. Other adverse effects

Other information : Not applicable.

## SECTION 13 DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.

Additional warning : None.

European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.

Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

## SECTION 14 TRANSPORT INFORMATION

### 14.1. UN number

UN nr. : None.

### 14.2. UN proper shipping name





## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

Transport name : Not regulated.

#### 14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : This product is not classified according to ADR/RID/ADN.

IMDG (sea)

Class : This product is not classified according to IMDG.

Marine pollutant : No

IATA (air)

Class : This product is not classified according to IATA.

#### 14.6. Special precautions for user

Other information : Country specific variations may apply.

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

## SECTION 15 REGULATORY INFORMATION

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

Community regulations : Regulation (EU) No 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

#### 15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

## SECTION 16 OTHER INFORMATION

#### 16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2015/830 dated 28 May 2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (\*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	: Acute Toxicity Estimate
CLP	: Classification, Labeling & Packaging
CMR	: Carcinogenic, Mutagenic or toxic for Reproduction
EEC	: European Economic Community
GHS	: Globally Harmonized System of Classification and Labelling of Chemicals
IATA	: International Air Transport Association
IBC code	: International Bulk Chemical Code
IMDG	: International Maritime Dangerous Goods Code



## Safety data sheet

According to Regulation (EU) No 2015/830

### Bar's Radiator Stop Leak Powder

LD50/LC50	: Lethal Dose/Concentration for 50% of a population
MAC	: Maximum Allowable Concentration
MARPOL	: International Convention for the Prevention of Pollution From Ships
NO(A)EL	: No Observed (Adverse) Effect Level
OECD	: Organisation for Economic Co-operation and Development
PBT	: Persistent, Bioaccumulative and Toxic
PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Skin Irrit. 2	: Calculation method.
Eye Irrit. 2	: Calculation method.
Skin Sens. 1	: Calculation method.

Full text of hazard classes mentioned in section 3:

Acute Tox. 2	: Acute toxicity, Hazard Category 2.
Acute Tox. 4	: Acute toxicity, category 4.
Skin Irrit. 2	: Skin irritation, category 2.
Eye Irrit. 2	: Eye irritation, category 2.
Skin Sens. 1	: Skin sensitization, category 1.
STOT SE 3	: Specific target organ toxicity after single exposure, category 3.
STOT RE 1	: Specific target organ toxicity — repeated exposure, category 1.

Full text of H-phrases mentioned in section 3:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.

Number format : ", " used as decimal separator.

End of safety data sheet.