Printing date: August 03, 2018 Revision: August 03, 2018

1 Identification

· Product identifier

· Trade name: Bar's Leaks® Head Seal™ Blown Head Gasket Repair

Product code: HG-1

· Recommended use and restriction on use

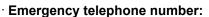
· Recommended use: Sealant

· Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Bar's Products P.O. Box 187 Holly, MI 48442 USA Phone: (810) 603-1321



ChemTel Inc.

(800)255-3924 (North America) +1 (813)248-0585 (International)



2 Hazard(s) identification

· Classification of the substance or mixture

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms:



GHS07

Signal word: Warning

· Hazard statements:

H317 May cause an allergic skin reaction.

Precautionary statements:

P261 Avoid breathing mist, vapors, or spray.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves and eye protection.

P302+P352 If on skin: Wash with plenty of water.

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

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

(Cont'd. on page 2)

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· Chemical characterization: Mixtures

· Components:			
1344-09-8 silicic acid, sodium salt		<10%	
	♦ Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318		
13463-67-7	titanium dioxide	<1%	
4719-04-4	2,2',2"-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	<1%	
	Acute Tox. 2, H330 STOT RE 1, H372		
	Acute Tox. 4, H302; Eye Irrit. 2A, H319; Skin Sens. 1, H317		

· Additional information:

Non-classification as a carcinogen is based on non-respirable form of product.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately remove any clothing soiled by the product.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Allergic reactions

Slight irritant effect on eyes.

Slight irritant effect on skin and mucous membranes.

Gastric or intestinal disorders when indested.

Nausea in case of ingestion.

Indication of any immediate medical attention and special treatment needed:

Treat skin and mucous membrane with antihistamine and corticoid preparations.

Contains 2,2',2"-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol. May produce an allergic reaction.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: None.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- Advice for firefighters
- · Protective equipment:

(Cont'd. on page 3)

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(Cont'd. of page 2)

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- Precautions for safe handling:

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

- Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplace:			
13463-67-7 titanium dioxide			
PEL (USA)	Long-term value: 15* mg/m³		
	*total dust		

REL (USA) See Pocket Guide App. A

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TLV (USA) Long-term value: 10 mg/m³
EL (Canada) Long-term value: 10* 3** mg/m³

*total dust; ** respirable fraction; IARC 2B

EV (Canada) Long-term value: 10 mg/m³

total dust

LMPE (Mexico) Long-term value: 10 mg/m³

Α4

Exposure controls

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

- Engineering controls: No relevant information available.
- Breathing equipment:

Not required under normal conditions of use.

Use suitable respiratory protective device when aerosol or mist is formed.

For spills, respiratory protection may be advisable.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Eve protection:



Safety glasses

- **Body protection:** Protective work clothing
- Limitation and supervision of exposure into the environment

No relevant information available.

· Risk management measures No relevant information available.

9 Physical and chemical properties

Information on basic physical and chemical properties

· Appearance:

Form: Viscous
Color: Dark grey
Odor: Mild

· Odor threshold: Not determined.

• pH-value at 20 °C (68 °F): <12

· Melting point/Melting range: Not determined.

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		(OH-I
		(Cont'd. of page
· Boiling point/Boiling range:	104 °C (219.2 °F)	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Product is not flammable.	
· Auto-ignition temperature:	Not determined.	
· Decomposition temperature:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
· Oxidizing properties:	Non-oxidizing.	
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
· Density:		
Relative density:	1.03	
Vapor density:	Not determined.	
Evaporation rate:	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/wate	er): Not determined.	
· Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Other information	No relevant information available.	

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability:
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions

Reacts with strong acids and oxidizing agents.

Toxic fumes may be released if heated above the decomposition point.

- · Conditions to avoid Store away from oxidizing agents.
- · Incompatible materials No relevant information available.
- · Hazardous decomposition products Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- LD/LC50 values that are relevant for classification: None.

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- · Primary irritant effect:
- On the skin: Slight irritant effect on skin and mucous membranes.
- · On the eye: Slight irritant effect on eyes.
- · Sensitization: Sensitization possible through skin contact.
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer):

Reference to titanium dioxide is based on unbound respirable particles and is not applicable to the product as supplied.

13463-67-7 titanium dioxide

2B

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eve contact.

Skin contact.

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

Contains known or suspect carcinogens when inhaled. Product is in non-inhalable form and is nonclassifiable as a carcinogen.

- · 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.

12 Ecological information

- ·Toxicity
- · Aquatic toxicity The product contains materials that are harmful to the environment.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- · Mobility in soil: No relevant information available.
- · Additional ecological information
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Smaller quantities can be disposed of with household waste.

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in

(Cont'd. on page 7)

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accordance with Local Authority requirements.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

4 Transport information	
UN-Number	Not so sulate d
· DOT, ADR, IMDG, IATA	Not regulated.
UN proper shipping name DOT, ADR, IMDG, IATA	Not regulated.
Transport hazard class(es)	
· DOT, ADR, IMDG, IATA	
Class	Not regulated.
· Packing group	
· DOT, ADR, IMDG, IATA	Not regulated.
· Environmental hazards	
· Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex	c II of
MARPOL73/78 and the IBC Code	Not applicable.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

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- · Proposition 65 (California)
- · Chemicals known to cause cancer:

Reference to titanium dioxide is based on unbound respirable particles and is not applicable to the product as supplied.

13463-67-7 titanium dioxide

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

IARC (International Agency for Research on Cancer):

Reference to titanium dioxide is based on unbound respirable particles and is not applicable to the product as supplied.

13463-67-7 titanium dioxide

2B

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision August 03, 2018 / -

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Met. Corr.1: Corrosive to metals - Category 1

Acute Tox. 4: Acute toxicity - Category 4

Acute Tox. 2: Acute toxicity - Category 2

Skin Corr. 1B: Skin corrosion/irritation - Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Skin Sens. 1: Skin sensitisation - Category 1

STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

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Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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