

#### Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010 Issue date: 5/27/2024 Revision date: 5/27/2026 Version: 2.0

### **SECTION 1: Identification**

#### **1.1. Product identifier**

Product form Trade name Type of product Product code Product group : Mixture

- : Radiator stop leak
- : Additive for vehicle cooling system
- : SH205
- : Trade product

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

:

Use of the substance/mixture

#### 1.3. Supplier's details

#### Manufacturer

Shield Chemicals (Pty) Ltd 9 London Rd Apex P.O. Box 1939 1501 Benoni – Gauteng South Africa T (011) 421 7111 Contact: Jayson Clark

#### 1.4. Emergency telephone number

Emergency number

: (011) 421 7111

SECTION 2: Hazards identification	
2.1. Classification of the substance or mi	xture
Classification according to the United Nations Flammable liquids Not classified Skin corrosion/irritation, Category 1 Serious eye damage/eye irritation, Category 1 Full text of H-statements: see section 16	GHS H314 H318
2.2. Label elements	
Labelling according to the United Nations GHS Hazard pictograms (GHS ZA)	
Signal word (GHS-ZA) Hazard statements (GHS ZA) Precautionary statements (GHS ZA)	<ul> <li>Danger</li> <li>H314 - Causes severe skin burns and eye damage</li> <li>P260 - Do not breathe dusts or mists.</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P280 - Wear eye protection, protective clothing, protective gloves.</li> <li>P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.</li> <li>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P305+P354+P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P316 - Get emergency medical help immediately.</li> <li>P317 - Get medical help.</li> <li>P321 - Specific treatment (see on this label).</li> <li>P363 - Wash contaminated clothing before reuse.</li> </ul>

### Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

P405 - Store locked up.

P501 - Dispose of contents and container to a hazardous or special waste collection point.

#### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects

: Causes severe skin burns and eye damage, Causes serious eye damage.

# SECTION 3: Composition/information on ingredients

#### 3.1. Substances

#### Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Sodium silicate	CAS-No.: 1344-09-8	10.0 - 20.0	Acute Tox. Not classified (Dermal) Aquatic Acute Not classified
Calcium silicate	CAS-No.: 1344-95-2	1.0 - 5.0	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

#### **SECTION 4: First aid measures**

4.1. Description of first aid measures	
First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	<ul> <li>Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.</li> </ul>
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.
4.2. Most important symptoms and effect	ts, both acute and delayed
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Special hazards arising from the substance or mixture		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

### Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010	0
SECTION 6: Accidental release mea	asures
6.1. Personal precautions, protective ed	quipment and emergency procedures
No additional information available	
<ul><li>6.1.1. For non-emergency personnel</li><li>Emergency procedures</li><li>6.1.2. For emergency responders</li><li>Protective equipment</li></ul>	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe vapours.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containm	ent and cleaning up
Methods for cleaning up Other information	<ul> <li>Take up liquid spill into absorbent material.</li> <li>Dispose of materials or solid residues at an authorized site.</li> </ul>
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	<ul> <li>Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe vapours. Wear personal protective equipment.</li> <li>Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>
7.2. Conditions for safe storage, include	ing any incompatibilities
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.
SECTION 8: Exposure controls/pers	sonal protection
8.1. Control parameters	
No additional information available	
8.2. Appropriate engineering controls	
Appropriate engineering controls Environmental exposure controls	<ul><li>Ensure good ventilation of the work station.</li><li>Avoid release to the environment.</li></ul>
8.3. Individual protection measures, such	ch as personal protective equipment (PPE)
Hand protection Eye protection Skin and body protection Respiratory protection Personal protective equipment symbol(s):	<ul> <li>Protective gloves</li> <li>Safety glasses</li> <li>Wear suitable protective clothing</li> <li>In case of insufficient ventilation, wear suitable respiratory equipment</li> </ul>
8.4. Exposure limit values for the other	components

No additional information available

### Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

9.1. Information on basic physical and ch	emical properties
Physical state	: Liquid
Appearance	: Liquid.
Colour	: Cream to brown.
Odour	: characteristic.
Odour threshold	: No data available
рН	: 11 – 12
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability	: Not applicable
Vapour pressure	: No data available
Vapour pressure at 50°C	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Density	: No data available
Relative gas density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
Lower explosion limit	: No data available

: No data available

#### 9.2. Other information

Upper explosion limit

No additional information available

#### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### **10.2. Chemical stability**

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

# Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Acute toxicity (oral):Acute toxicity (dermal):Acute toxicity (inhalation):	Not classified Not classified Not classified
Sodium silicate (1344-09-8)	
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 2.06 mg/l air Animal: rat, Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)
Skin corrosion/irritation :	Causes severe skin burns. pH: 11 – 12
Serious eye damage/irritation :	Causes serious eye damage. pH: 11 – 12
Respiratory or skin sensitisation :	Not classified
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Not classified
Reproductive toxicity :	Not classified
STOT-single exposure :	Not classified
Calcium silicate (1344-95-2)	
STOT-single exposure	Not available
STOT-repeated exposure :	Not classified
Aspiration hazard :	Not classified
Sodium silicate (1344-09-8)	
Animal studies and expert judgment for classification	False
Calcium silicate (1344-95-2)	·
Animal studies and expert judgment for classification	False

### **SECTION 12: Ecological information**

12.1. Toxicity	
Ecology - general : Hazardous to the aquatic environment, short-term : (acute) Hazardous to the aquatic environment, long-term : (chronic)	Before neutralisation, the product may represent a danger to aquatic organisms. Not classified Not classified
Sodium silicate (1344-09-8)	
LC50 - Fish [1]	1108 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	1700 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	207 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 345.4 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

# Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

12.2. Persistence and degradability	
Radiator stop leak	
Persistence and degradability	No additional information available
12.3. Bioaccumulative potential	
Radiator stop leak	
Bioaccumulative potential	No additional information available
12.4. Mobility in soil	
Radiator stop leak	
Mobility in soil	No additional information available
12.5. Other adverse effects	
	Not classified No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

# SECTION 14: Transport information

SANS	IMDG	ΙΑΤΑ
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No

14.6. Special precautions for user

SANS

No data available

IMDG

No data available

IATA No data available

### Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

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

Not applicable

### SECTION 15: Regulatory information

15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information		
Issue date Revision date	: 27/05/2024 : 27/05/2026	
Full text of H-	statements	
H313	May be harmful in contact with skin	
H314	Causes severe skin burns and eye damage	
H315	Causes skin irritation	
H318	Causes serious eye damage	
H319	Causes serious eye irritation	
H335	May cause respiratory irritation	

Safety Data Sheet (SDS), South Africa

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.