



SAFETY DATA SHEET

1. Identification of the product

GHS product identifier Timken GR219

Other means of identification None.

Recommended use of the chemical and restrictions on use

Recommended use Lubricating grease.

Recommended restrictions For industrial use only.

Suppliers details

Company name The Timken Company
Address 4500 Mount Pleasant Street NW
North Canton, OH 44720
United States

Telephone (234) 262-3000

E-mail Not available.

Contact person INFOTRAC

Emergency phone number 1-352-323-3500

2. Hazard identification

Classification of the substance or mixture

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 1
Sensitization, skin Category 1
Reproductive toxicity (fertility) Category 2

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 3
Hazardous to the aquatic environment, long-term hazard Category 3

GHS label elements, including precautionary statements



Signal word Danger

Hazard statement

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H361 Suspected of damaging fertility.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P308 + P313 If exposed or concerned: 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.
P310	Immediately call a POISON CENTER/doctor.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Storage

P405	Store locked up.
------	------------------

Disposal

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

Other hazards which do not result in classification None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical identity	Common name(s), synonym(s)	CAS number and other unique identifiers	Concentration
Calcium dodecylbenzene sulfonate		26264-06-2	7 - 13
1-Propene, 2-methyl-sulfurized		68511-50-2	1 - 5
Zinc naphthenate		12001-85-3	1 - 5
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene		68411-46-1	0.1 - 1

Composition comments All concentrations are in percent by weight. Components not listed are either non-hazardous or are below reportable limits.

4. First-aid measures

Description of necessary first-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash. Suspected of damaging fertility.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.

Special protective actions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use water spray to cool unopened containers. Water runoff can cause environmental damage.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

For emergency responders Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up The product is immiscible with water and will spread on the water surface. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. The product is insoluble in water.

7. Handling and storage

Precautions to ensure safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get this material in contact with eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Control banding approach Not applicable.

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Grease.
Color	Black.
Odor	Mild.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not applicable.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.

Ingestion	May cause discomfort if swallowed.
Symptoms	Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
-----------------------	-----------------------------------

Product	Species	Test Results
Timken GR219 (CAS Mixture)		
Acute		
Dermal		
ATEmix		12210 mg/kg bw
Oral		
ATEmix		5826 mg/kg bw

Components	Species	Test Results
1-Propene, 2-methyl- sulfurized (CAS 68511-50-2)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
<i>Vapor</i>		
LC50		> 0.39 mg/l, 4 hours
Oral		
LD50	Rat	5700 mg/kg
Calcium dodecylbenzene sulfonate (CAS 26264-06-2)		
Acute		
Oral		
LD50	Rat	1300 mg/kg
Zinc naphthenate (CAS 12001-85-3)		
Acute		
Oral		
LD50	Rat	4920 mg/kg

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
----------------------------------	---

Serious eye damage/eye irritation	Causes serious eye damage.
--	----------------------------

Respiratory or skin sensitization

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

Skin sensitization	May cause an allergic skin reaction.
---------------------------	--------------------------------------

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

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

Reproductive toxicity	Suspected of damaging fertility.
------------------------------	----------------------------------

Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
---	---

Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
---	---

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

Other information	None known.
--------------------------	-------------

12. Ecological information

Ecotoxicity	Harmful to aquatic life with long lasting effects.
--------------------	--

Components		Species	Test Results
Zinc naphthenate (CAS 12001-85-3)			
Aquatic			
Crustacea	EC50	Daphnia magna	4.6 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	1.53 mg/l, 96 hours
		Rainbow trout (Oncorhynchus mykiss)	1.1 mg/kg, 96 hours
Persistence and degradability		No data is available on the degradability of this product.	
Bioaccumulative potential		No data available.	
Mobility in soil		The product is insoluble in water. Expected to have low mobility in soil.	
Other adverse effects		No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

13. Disposal considerations

Disposal methods

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

ANTT

Not regulated as dangerous goods.

DOT

Not regulated as dangerous goods.

SCT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

International regulations

Montreal Protocol

Not listed.

Stockholm Convention

Not listed.

Rotterdam Convention

Not listed.

Kyoto protocol

Not listed.

Basel Convention

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Revision date 08-October-2025

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists.
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
ANTT: National Agency of Land Transport.
CAS: Chemical Abstract Service.
DOT: Department of Transportation.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
MARPOL: International Convention for the Prevention of Pollution from Ships.
NFPA: National Fire Protection Association.
SCT: Secretariat of Communications and Transportation (NOM-002-SCT/2011).
STEL: Short term exposure limit.
TWA: Time Weighted Average.

References

IARC Monographs. Overall Evaluation of Carcinogenicity
Workplace Threshold Quantities of Hazardous Chemicals

Disclaimer

The Timken Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.