

SAFETY DATA SHEET

1. Identification of the hazardous chemical and of the supplier

Product identifier: TIMKEN GR 219

Other means of identification: No data available.

Recommended use of the chemical and restrictions on use

Recommended use: Lubricating grease

Recommended restrictions: Industrial use only

Manufacturer/Importer/Distributor Information

Distributor

Company Name: The Timken Corporation
Address: 4500 Mt. Pleasant St. NW
North Canton, OH 44720 U.S.A.
Telephone: 234.262.3000

Emergency telephone number: INFOTRAC US & CANADA – 800.535.5053 Outside U.S. & Canada
+1 352.323.3500

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Dermal)	Category 5
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Skin sensitizer	Category 1
Toxic to reproduction	Category 2

Unknown toxicity - Health

Acute toxicity, oral	25 %
Acute toxicity, dermal	16.47 %
Acute toxicity, inhalation, vapor	45.33 %
Acute toxicity, inhalation, dust or mist	45.25 %

Label Elements

Hazard Symbol:



Signal Word:

Warning

Hazard Statement: H313: May be harmful in contact with skin.
 H315: Causes skin irritation.
 H319: Causes serious eye irritation.
 H317: May cause an allergic skin reaction.
 H361: Suspected of damaging fertility or the unborn child.

Precautionary Statements

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.
 P264: Wash face, hands and any exposed skin thoroughly after handling.
 P272: Contaminated work clothing should not be allowed out of the workplace.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response: P302+P352: IF ON SKIN: Wash with plenty of water.
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
 P312: Call a POISON CENTER or doctor/ physician if you feel unwell.
 P321: Specific treatment (see supplemental first aid instructions on this label).
 P362+P364: Take off contaminated clothing and wash it before reuse.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313: If eye irritation persists: Get medical advice/attention.
 P308+P313: IF exposed or concerned: Get medical advice/attention.

Storage: P405: Store locked up.

Disposal: P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Residual oils	Trade Secret	40 - 70%
Mineral oil	Trade Secret	7 - 13%
Dodecylbenzene calcium sulfonate	Trade Secret	7 - 13%
Calcium 12-hydroxyoctadecanoate	Trade Secret	7 - 13%
Calcium carbonate	471-34-1	5 - 10%
Graphite	7782-42-5	3 - 7%
Naphthenic acids, zinc salts	Trade Secret	1 - 5%
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	0.1 - 1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Trade secret information: A specific chemical identity and/or percentage of composition has been
 SDS_MX - 00000006919

withheld as a trade secret.

4. First-aid measures

Inhalation:	Move to fresh air. Call a POISON CENTER/doctor if you feel unwell.
Skin Contact:	Remove contaminated clothing and shoes. Wash contact areas with soap and water. If skin irritation occurs: Get medical advice/attention.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Ingestion:	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Most important symptoms/effects, acute and delayed

Symptoms:	No data available.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	Get medical attention if symptoms occur.
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5. Fire-fighting measures

General Fire Hazards:	No unusual fire or explosion hazards noted.
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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Water spray, fog, CO ₂ , dry chemical, or regular foam. Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical:	Heat may cause the containers to explode. During fire, gases hazardous to health may be formed.
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Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
For non-emergency personnel:	No data available.
For emergency responders:	No data available.
Methods and material for containment and cleaning up:	Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal.
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling:	Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Do not expose to intense heat as product may expand and pressurize container. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Avoid contact with eyes, skin, and clothing. Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Do not expose to intense heat as product may expand and pressurize container.
Conditions for safe storage, including any incompatibilities:	Store in original tightly closed container. Avoid contact with oxidizing agents. Store away from incompatible materials. Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Residual oils	VLE-PPT	5 mg/m ³	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Mineral oil	VLE-PPT	5 mg/m ³	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Graphite - Respirable fraction.	VLE-PPT	2 mg/m ³	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)

Appropriate Engineering Controls	No data available.
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Individual protection measures, such as personal protective equipment

General information:	Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) 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.
Eye/face protection:	Wear safety glasses with side shields (or goggles).
Skin Protection	
Hand Protection:	No data available.
Other:	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator. Seek advice from supervisor on the company's respiratory protection standards.
Hygiene measures:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. Physical and chemical properties

Appearance

Physical state:	solid
Form:	Grease
Color:	Black
Odor:	Mild
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	520 °C
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Density:	No data available.
Relative density:	1.01
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	No data available.

Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	> 22 mm ² /s (40 °C, estimated)

10. Stability and reactivity

Reactivity:	Not reactive during normal use.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	None under normal conditions.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	None under normal conditions. Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact:	Causes skin irritation. May cause an allergic skin reaction. Prolonged skin contact may cause redness and irritation.
Eye contact:	Causes serious eye irritation.
Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise. May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	ATEmix (): > 5000 mg/kg

Dermal

Product: ATEmix (): 2000 - 5000 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Residual oils LC 50 (Rat): < 5.7 mg/l
LC 50: 5.7 mg/l

Mineral oil LC 50 (Rat): > 5.53 mg/l
LC 50 (Rat): 22 mg/l

Graphite LC 50 (Rat): > 2,000 mg/m³

Benzenamine, N-phenyl-,
reaction products with
2,4,4-trimethylpentene LC 50 (Rat): > 5.8 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Residual oils in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Key study
in vivo (Rabbit): Not irritant , 24 h Experimental result, Key study
in vivo (Rabbit): Not irritant , 72 h Experimental result, Key study

Mineral oil in vivo (Rabbit): Not irritant , 72 h Experimental result, Key study
in vivo (Rabbit): Not irritant , 72 h Experimental result, Supporting study
in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Supporting study
in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Supporting study
in vivo (Rabbit): Not irritant , 24 h Experimental result, Supporting study
in vivo (Rabbit): Category 2 , 24 - 72 h Experimental result, Key study
in vivo (Rabbit): Not irritant , 24 h Experimental result, Supporting study
in vivo (Rabbit): Not irritant , 72 h Experimental result, Supporting study
in vivo (Rabbit): Not irritant , 72 h Experimental result, Supporting study
in vivo (Rabbit): Not irritant , 24 h Experimental result, Key study
in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Key study
in vivo (Rabbit): Not irritant , 24 h Experimental result, Supporting study

Calcium 12-
hydroxyoctadecanoate In vitro (Human, in vitro reconstituted epidermis model): Non-corrosive , 2 d
Read-across from supporting substance (structural analogue or surrogate),
Key study
in vivo (Rabbit): Not irritant , 4 - 72 h Experimental result, Supporting study
In vitro (Human, in vitro reconstituted epidermis model): Not irritant , 6 d
Read-across from supporting substance (structural analogue or surrogate),
Key study

Calcium carbonate Graphite	in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Key study in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Key study In vitro (In vitro): Not irritant , 3 min Experimental result, Supporting study in vivo (Rabbit): Not irritant , > 0 - 72 h Experimental result, Key study In vitro (In vitro): Not irritant , 1 h Experimental result, Supporting study in vivo (Rabbit): Slightly irritating , 1 - 168 h Experimental result, Key study
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	

Serious Eye Damage/Eye Irritation

Product: No data available.
Specified substance(s):

Residual oils	Rabbit, 24 hrs: Not irritating EU
Mineral oil	Rabbit, 24 hrs: Not irritating EU Rabbit, 48 hrs: Not irritating EU
Calcium carbonate	Rabbit, 24 - 72 hrs: Not irritating EU
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Rabbit, 1 - 168 hrs: Not irritating EU

Respiratory or Skin Sensitization

Product: May cause an allergic skin reaction.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Calcium carbonate LC 50 (Fish): > 100 mg/l

Graphite LC 50 (Fish, 96 h): > 100 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Mineral oil EC50 (Daphnia): > 1,000 mg/l

Calcium carbonate EC50 (Daphnia): > 100 mg/l

Graphite EC50 (Daphnia, 48 h): > 100 mg/l

Benzenamine, N-phenyl-,
reaction products with
2,4,4-trimethylpentene EC50 (Water Flea, 48 h): 51 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Benzenamine, N-phenyl-,
reaction products with
2,4,4-trimethylpentene EC50 (Water Flea, 48 d): > 51 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

Graphite EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 100 mg/l

Benzenamine, N-phenyl-,
reaction products with
2,4,4-trimethylpentene EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 100 mg/l

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential**Bioconcentration Factor (BCF)**

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Residual oils No data available.

Mineral oil No data available.

Dodecylbenzene calcium sulfonate No data available.

Calcium 12- No data available.

hydroxyoctadecanoate

Calcium carbonate No data available.

Graphite No data available.

Naphthenic acids, zinc salts No data available.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. It is the responsibility of the product user or owner to determine at the time of disposal, which waste regulations must be applied.

Contaminated Packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated.

IATA

Not regulated.

IMDG

Not regulated.

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

Mexico. Substances subject to reporting for the pollutant release and transfer registry (PRTR)
Not applicable

Mexico. Federal Law for the Control of Chemical Substances Susceptible to Diversion to Manufacturing of Chemical Weapons, Appendix 1: National list of chemical substances
Not applicable

Mexico. Wastewater Discharges - Maximum Limits into Coastal Waters, Dams, Rivers, Soil and Wetlands (NOM-001-ECOL)
Not Regulated

Mexico. Hazardous Chemicals (NOM-028-STPS-2012, System for administration of workplace safety in the process and critical equipment for handling hazardous chemicals, Appendix A, Table A.I)
Not applicable

Mexico. Narcotic Drugs List (General Health Law, Articles 234 & 239, Feb. 7, 1984)
Not applicable

Mexico. Psychotropic Drugs (General Health Law, Feb. 7, 1984, Articles 245 & 254 Bis)
Not applicable

16. Other information, including date of preparation or last revision

Issue Date: 04/03/2023

Revision Information: 01/30/2023: ARGHS_MX

Version #: 1.0

Further Information: No data available.

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.