

## SAFETY DATA SHEET

### 1. Identification of the hazardous chemical and of the supplier

**Product identifier:** TIMKEN GR 255

**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

Skin Corrosion/Irritation Category 3  
Serious Eye Damage/Eye Irritation Category 2A

##### Unknown toxicity - Health

Acute toxicity, oral 2.81 %  
Acute toxicity, dermal 5.11 %  
Acute toxicity, inhalation, vapor 26.39 %  
Acute toxicity, inhalation, dust or mist 24.88 %

#### Label Elements

##### Hazard Symbol:



**Signal Word:** Warning

**Hazard Statement:** H316: Causes mild skin irritation.  
H319: Causes serious eye irritation.

## Precautionary Statements

**Prevention:** P264: Wash face, hands and any exposed skin thoroughly after handling.  
P280: Wear eye protection/face protection.

**Response:** P332+P313: If skin irritation occurs: 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.  
P337+P313: If eye irritation persists: Get medical advice/attention.

## 3. Composition/information on ingredients

### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	40 - 70%
Residual oils (petroleum), solvent-dewaxed	64742-62-7	15 - 40%
Residual oils (petroleum), solvent deasphalted	64741-95-3	7 - 13%
Lithium soap	7620-77-1	5 - 10%
Asphalt, non-oxidized	8052-42-4	1 - 5%
Graphite	7782-42-5	1 - 5%
Zinc compound	68457-79-4	0.1 - 1.0%

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

## 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:** Rinse mouth thoroughly. Call a POISON CENTER/doctor if you feel unwell. Do NOT induce vomiting.

### 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.

## 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Water spray, fog, CO<sub>2</sub>, 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.

### 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. Ensure adequate ventilation.

**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. Avoid contact with eyes. Wash hands thoroughly after handling.

**Conditions for safe storage, including any incompatibilities:** Store in original tightly closed container. Avoid contact with oxidizing agents. Store away from incompatible materials.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Distillates (petroleum), hydrotreated heavy naphthenic	VLE-PPT	5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Residual oils (petroleum), solvent-dewaxed	VLE-PPT	5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Residual oils (petroleum), solvent deasphalted	VLE-PPT	5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Asphalt, non-oxidized - Inhalable fraction. - as benzene solubles	VLE-PPT	0.5 mg/m3	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/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)

#### Appropriate Engineering Controls

No data available.

#### 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:	Dark gray
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:	248 °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 <sup>2</sup> /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

<b>Inhalation:</b>	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.
<b>Skin Contact:</b>	Prolonged skin contact may cause redness and irritation.
<b>Eye contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	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

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

#### Information on toxicological effects

##### Acute toxicity (list all possible routes of exposure)

<b>Oral</b>	
<b>Product:</b>	ATEmix (): > 5000 mg/kg
<b>Dermal</b>	
<b>Product:</b>	ATEmix (): > 5000 mg/kg
<b>Inhalation</b>	
<b>Product:</b>	No data available.

**Specified substance(s):**

Distillates (petroleum),  
hydrotreated heavy  
naphthenic LC 50 (Rat): > 5,000 mg/l  
LC 50 (Rat): > 5.53 mg/l  
LC 50: > 5,000 mg/l

Residual oils (petroleum),  
solvent-dewaxed LC 50 (Rat): < 5.7 mg/l  
LC 50: 5.7 mg/l

Residual oils (petroleum),  
solvent deasphalted LC 50 (Rat): 10.5 mg/l  
LC 50 (Rat): 2.18 mg/l  
LC 50 (Rat): 9.6 mg/l  
LC 50 (Rat): > 2.5 mg/l  
LC 50 (Rat): > 5.53 mg/l  
LC 50 (Rat): > 5 mg/l  
LC 50 (Rat): 10.5 mg/l  
LC 50 (Rat): > 5.3 mg/l  
LC 50 (Rat): 2.18 mg/l  
LC 50 (Rat): < 5.7 mg/l  
LC 50 (Rat): > 4.026 mg/l  
LC 50 (Rat): 9.6 mg/l  
LC 50 (Rat): > 5 mg/l  
LC 50 (Rat): > 2.4 mg/l  
LC 50 (Rat): > 5.2 mg/l  
LC 50 (Rat): > 5 mg/l  
LC 50 (Rat): > 5 mg/l  
LC 50 (Rat): 5.7 mg/l  
LC 50 (Rat): > 5.2 mg/l  
LC 50 (Rat): > 4.7 mg/l  
LC 50 (Rat): > 5.3 mg/l

Graphite LC 50 (Rat): > 2,000 mg/m3

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** No data available.

**Specified substance(s):**

Distillates (petroleum), hydrotreated heavy naphthenic	in vivo (Rabbit): Not irritant , 72 h Experimental result, Key study in vivo (Rabbit): Not irritant , 24 h Experimental result, Key study
Residual oils (petroleum), solvent-dewaxed	in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Key study in vivo (Rabbit): Not irritant , 24 h Experimental result, Key study
Residual oils (petroleum), solvent deasphalted	in vivo (Rabbit): Not irritant , 72 h Experimental result, Key study in vivo (Rabbit): Not irritant , 24 h Experimental result, Key study
Lithium soap	in vivo (Rabbit): Slightly irritating , 1 - 7 d Experimental result, Supporting study In vitro (Human, in vitro reconstituted epidermis model): Not irritant , 6 d Experimental result, Key study in vivo (Rabbit): Not irritant , 4 - 72 h Experimental result, Supporting study In vitro (Human, in vitro reconstituted epidermis model): Non-corrosive , 2 d Experimental result, Key study
Asphalt, non-oxidized	in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Key study Irritating.
Graphite	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
Zinc compound	(Rabbit): Not irritant , 24 - 72 h Experimental result, Supporting study in vivo (Rabbit): Category 2 , 24 - 72 h Experimental result, Key study in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Key study

## Serious Eye Damage/Eye Irritation

**Product:** No data available.

### Specified substance(s):

Distillates (petroleum), hydrotreated heavy naphthenic	Rabbit, 48 hrs: Not irritating EU
Residual oils (petroleum), solvent-dewaxed	Rabbit, 24 hrs: Not irritating EU
Residual oils (petroleum), solvent deasphalted	Rabbit, 24 hrs: Not irritating EU Rabbit, 48 hrs: Not irritating EU
Asphalt, non-oxidized	Rabbit, 24 hrs: Not irritating EU Irritating.
Zinc compound	Rabbit, 24 - 72 hrs: Corrosive OECD GHS

## Respiratory or Skin Sensitization

**Product:** No data available.

## 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:** No data available.

**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):

Distillates (petroleum),  
hydrotreated heavy  
naphthenic LC 50 (Fish, 96 h): > 100 mg/l

Residual oils (petroleum),  
solvent deasphalted LC 50 (Fish, 96 h): > 100 mg/l

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

Zinc compound LC 50 (Pimephales pomoxis, 96 h): 100 mg/l  
LC 50 (Pimephales pomoxis, 96 h): 25 - 50 mg/l

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):

Distillates (petroleum),  
hydrotreated heavy  
naphthenic EC50 (Shrimp (*Callinassa australiensis*), 48 h): > 100 mg/l

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

Zinc compound                      EC50 (Daphnia magna, 48 h): 4 mg/l

## Chronic hazards to the aquatic environment:

### Fish

**Product:**                                      No data available.

### Aquatic Invertebrates

**Product:**                                      No data available.

### Specified substance(s):

Distillates (petroleum), hydrotreated heavy naphthenic	EC50 (Daphnia, 14 d): 0.058 mg/l EC50 (21 d): 0.054 mg/l EC50 (2 d): > 10,000 mg/l
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### Toxicity to Aquatic Plants

**Product:**                                      No data available.

### Specified substance(s):

Distillates (petroleum), hydrotreated heavy naphthenic	EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 100 mg/l
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Residual oils (petroleum), solvent deasphalted	EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 100 mg/l
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Graphite	EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 100 mg/l
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Zinc compound	EC50 (Pseudokirchneriella subcapitata (green algae), 96 h): 1 mg/l
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## 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

Distillates (petroleum), hydrotreated heavy naphthenic	No data available.
Residual oils (petroleum), solvent-dewaxed	No data available.
Residual oils (petroleum), solvent deasphalted	No data available.
Lithium soap	No data available.
Asphalt, non-oxidized	No data available.
Graphite	No data available.
Zinc compound	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)**  
Zinc compound Listed.

**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

<b>16. Other information, including date of preparation or last revision</b>
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**Issue Date:** 04/04/2023

**Revision Information:** 01/19/2023: 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.