

## 1. Identification

**Product identifier** Timken GR220  
**Other means of identification** None.

### Recommended use of the chemical and restrictions on use

**Recommended use** Lubricating grease.  
**Recommended restrictions** For industrial use only.

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** The Timken Company  
**Address** 4500 Mount Pleasant Street NW  
 North Canton, OH 44720  
 United States  
**Telephone** (234) 262-3000  
**Website** Not available.  
**E-mail** Not available.  
**Contact person** INFOTRAC  
**Emergency phone number** 1-352-323-3500

## 2. Hazards identification

**Physical hazards** Not classified.  
**Health hazards** Reproductive toxicity (fertility) Category 2  
**Environmental hazards** Not classified.

### Label elements



**Signal word** Warning  
**Hazard statement** Suspected of damaging the unborn child.  
**Precautionary statement**  
**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.  
**Response** IF exposed or concerned: Get medical advice/attention.  
**Storage** Store locked up.  
**Disposal** 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

### Mixture

Chemical name	CAS number	%
3,3'-dicyclohexyl-1,1'-methylenebis (4,1-phenylene)diurea	58890-25-8	5 - 10
1-Propene, 2-methyl- sulfurized	68511-50-2	1 - 5
3,3'-Dioctadecyl -1,1'-methylenebis (4,1-phenylene) diurea	43136-14-7	1 - 5
Talc	14807-96-6	1 - 5
Urea, N-(4-((4-(((cyclohexylamino)carbonyl)amino)phenyl)methyl)phenyl)-N'-octadecyl-	154099-21-5	1 - 5

Chemical name	CAS number	%
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	0.1 - 1
Molybdenum, bis(dibutylcarbamodithioato)di- $\mu$ -oxo dioxodi-, sulfurized	68412-26-0	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

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Do not induce vomiting without advice from poison control centre. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms/effects, acute and delayed** Suspected of damaging the unborn child.

**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.

#### 5. Fire-fighting measures

**Suitable extinguishing media** Foam. Dry chemicals. Carbon dioxide (CO<sub>2</sub>).

**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 equipment and precautions for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions** Cool containers exposed to heat with water spray and remove container, if no risk is involved.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards** Will burn if involved in a fire. No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up** Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

**Precautions for safe handling** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store locked up. Keep away from heat and sources of ignition. Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

#### 8. Exposure controls/personal protection

##### Occupational exposure limits

##### US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Talc (CAS 14807-96-6)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.

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

<b>Appropriate engineering controls</b>	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.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Use of an impervious apron is recommended.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment. Use respiratory equipment with combination filter, type A2/P2.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	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.

## 9. Physical and chemical properties

### Appearance

**Physical state** Solid.

**Form** Semi-solid.

**Colour** Light tan.

**Odour** Mild.

**Odour threshold** Not available.

**pH** Property has not been measured.

**Melting point/freezing point** Property has not been measured.

**Initial boiling point and boiling range** Property has not been measured.

**Flash point** 200 °C (392 °F)

**Evaporation rate** Not available.

**Flammability (solid, gas)** Will burn if involved in a fire.

### Upper/lower flammability or explosive limits

**Explosive limit - lower (%)** Property has not been measured.

**Explosive limit – upper (%)** Property has not been measured.

**Vapour pressure** Property has not been measured.

**Vapour density** Property has not been measured.

**Relative density** 0.95

### Solubility(ies)

**Solubility (water)** Insoluble in water.

**Partition coefficient (n-octanol/water)** Not applicable.

**Auto-ignition temperature** Property has not been measured.

**Decomposition temperature** Property has not been measured.

**Viscosity** Not available.

### Other information

**Explosive properties** Not explosive.

**Kinematic viscosity** Property has not been measured.

**Oxidising properties** Not oxidising.

## 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 oxidising 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** Prolonged skin contact may cause temporary irritation.  
**Eye contact** Direct contact with eyes may cause temporary irritation.  
**Ingestion** Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

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

Product	Species	Test Results
Timken GR220 (CAS Mixture)		
<b>Acute</b>		
<b>Dermal</b>		
ATEmix		32800 mg/kg bw

Components	Species	Test Results
1-Propene, 2-methyl- sulfurized (CAS 68511-50-2)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
<i>Vapour</i>		
LC50		> 0.39 mg/l, 4 hours
<b>Oral</b>		
LD50	Rat	5700 mg/kg
Molybdenum, bis(dibutylcarbamodithioato)di- $\mu$ -oxodioxodi-, sulfurized (CAS 68412-26-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 5000 mg/kg
<b>Inhalation</b>		
<i>Dust</i>		
LC50	Rat	34.4 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg

Talc (CAS 14807-96-6)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Urea, N-(4-(((cyclohexylamino)carbonyl)amino)phenyl)methyl)phenyl)-N'-octadecyl- (CAS 154099-21-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

### Respiratory or skin sensitisation

**Respiratory sensitisation** Not a respiratory sensitiser.

**Skin sensitisation** This product is not expected to cause skin sensitisation.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

**ACGIH Carcinogens**

Molybdenum, bis(dibutylcarbamodithioato)di- $\mu$ -oxodioxodi-, sulfurized (CAS 68412-26-0) A3 Confirmed animal carcinogen with unknown relevance to humans.  
Talc (CAS 14807-96-6) A4 Not classifiable as a human carcinogen.

**Reproductive toxicity** Suspected of damaging the unborn child.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

**Further information** None known.

**12. Ecological information**

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Molybdenum, bis(dibutylcarbamodithioato)di- $\mu$ -oxodioxodi-, sulfurized (CAS 68412-26-0)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EL50 Pseudokirchneriella subcapitata	> 100 mg/l, 72 Hours
Crustacea	EL50 Daphnia magna	> 100 mg/l, 48 Hours
Fish	LL50 Pimephales promelas	> 100 mg/l, 48 Hours
<i>Chronic</i>		
Algae	NOELR Pseudokirchneriella subcapitata	100 mg/l, 72 Hours
Urea, N-(4-((4-(((cyclohexylamino)carbonyl)amino)phenyl)methyl)phenyl)-N'-octadecyl- (CAS 154099-21-5)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EL50 Raphidocelis subcapitata	> 100, 72 Hours
Crustacea	EL50 Daphnia magna	> 100 mg/l, 48 Hours
Fish	LL50 Danio rerio	> 100 mg/l, 96 Hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

**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 instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**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 (see: Disposal instructions).

**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**

**ADR** Not regulated as dangerous goods.

**RID** 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

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

### Controlled Narcotic & Psychotropic Precursors List

Not regulated

### CWC (Chemical Weapons Convention Act 2000, Schedules 1-3)

Not regulated

### List of Hazardous Chemicals (Manufacture, Storage and Import of Hazardous Chemical Rules, Schedule I (Part II)).

Not regulated

### Hazardous Chemicals, Schedule 2: Threshold Quantities at an Isolated Storage (Manufacture, Storage and Import of Hazardous Chemical Rules 1989, as amended).

Not regulated

### Hazardous Chemicals, Schedule 3: Threshold Quantities in an Industrial Installation (Manufacture, Storage and Import of Hazardous Chemical Rules 1989, as amended).

Not regulated

### Ozone Depleting Substances (ODS) (Ozone Depleting Substances (Regulation and Control) Rules 2000, Schedule 1).

Not regulated

### International regulations

#### Stockholm Convention

Not listed.

#### Rotterdam Convention

Not listed.

#### Montreal Protocol

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)	No
Canada	Domestic Substances List (DSL)	No
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)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
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	No

\*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, including date of preparation or last revision

Issue date 12-January-2026

Revision date -

Version No. 01

**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.