



# SAFETY DATA SHEET

## TIMKEN BALL BEARING PILLOW BLOCK GREASE (GR220)

### 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

<b>Product name</b>	TIMKEN BALL BEARING PILLOW BLOCK GREASE (GR220)
<b>Synonyms, trade names</b>	LUBRICATING GREASE
<b>Product number</b>	GR 220
<b>Supplier</b>	The Timken Corporation, 1835 Dueber Ave., P.O. Box 6930, Canton, OH 44706-0930, USA Tel: (330) 438 - 3000
<b>Emergency telephones</b>	INFOTRAC U.S. and Canada - (800) 535-5053 Outside the U.S. and Canada - +01-352-323-3500
<b>Date of last issue</b>	2009-04-02

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Name</b>	<b>EC no.</b>	<b>CAS no.</b>	<b>Content</b>	<b>Symbol</b>	<b>R-phrases</b>
Lubricating oils (petroleum), base oils, highly refined**(2)	Mixture	Mixture**(2)	80-90 %	Xi	R-38
POLYUREA THICKENER	Proprietary	PROPRIETA RY	10-20 %	-	R-53
ALKYL PHOSPHATES, AMINE NEUTRAL	Proprietary	Proprietary	1-5 %	Xi	R-36/38

See section 16 for explanations of R-phrases

<b>Composition comments</b>	<p>**(2) The base oil for this product can be a mixture of any of the following highly refined petroleum streams:  CAS 64741-88-4; CAS 64741-89-5; CAS 64741-96-4; CAS 64741-97-5; CAS 64742-01-4; CAS 64742-52-5; CAS 64742-53-6; CAS 64742-54-7; CAS 64742-55-8; CAS 64742-56-9; CAS 64742-57-0; CAS 64742-62-7; CAS 64742-63-8; CAS 64742-65-0; CAS 72623-83-7; CAS 72623-85-9; CAS 72623-86-0; CAS 72623-87-1.  Carcinogenicity: The petroleum base oils contained in this product have been highly refined by a variety of processes including solvent extraction, hydrotreating, and dewaxing to remove aromatics and improve performance characteristics. All petroleum base oils contained in this product meet the IP 346 criteria of less than 3 percent PAH's and are not considered carcinogen by IARC, NTP or OSHA.</p>
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### 3. HAZARDS IDENTIFICATION

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Exposure to vapors generated at high temperatures, may cause respiratory irritation. Prolonged exposure to product mist or vapors may cause respiratory irritation.

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### 4. FIRST AID MEASURES

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<b>Inhalation</b>	Move the exposed person to fresh air at once. For breathing difficulties oxygen could be necessary. Get medical attention if any discomfort continues.
<b>Ingestion</b>	DO NOT INDUCE VOMITING! Get medical attention immediately! Drink plenty of water. Avoid milk. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>Eyes</b>	Rinse with water. Contact physician if discomfort continues.

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### 5. FIRE FIGHTING MEASURES

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<b>Extinguishing media</b>	Water spray, fog or mist. Foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemicals, sand, dolomite etc.
<b>Special firefighting procedures</b>	Use water to keep fire-exposed containers cool and disperse vapours. Water spray could be used to flush spills away from exposures and dilute spills to non-flammable mixtures. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.
<b>Specific hazards</b>	If heated, volume and pressure increases strongly, resulting in explosion of container.
<b>Hazardous combustion products</b>	Acrid smoke/fumes. Oxides of: Carbon. Nitrogen. Phosphorus.
<b>Protective measures in the event of fire</b>	Firefighters exposed to combustion gases/decomposition products should use a respiratory protective device.

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### 6. ACCIDENTAL RELEASE MEASURES

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<b>Personal protection</b>	Minimize skin contact. Avoid breathing vapors; wear appropriate respirator. Remove sources of ignition. Wear suitable eye protection.
<b>Spill clean-up methods</b>	Ventilate well. Wear necessary protective equipment. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Do not let washing down water contaminate ponds or waterways. Flush area with water.

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### 7. HANDLING AND STORAGE

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<b>Usage precautions</b>	Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Containers should be kept tightly closed. Avoid spilling, skin and eye contact. Eye wash facilities and emergency shower must be available when handling this product.
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<b>Usage description</b>	Prevent small spills and leakages to avoid slip hazard.
<b>Storage precautions</b>	Keep away from heat, sparks and open flame. Store separated from: Acids. Oxidizer.
<b>Storage criteria</b>	Storage of chemicals.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limits

Ingredient name	CAS no.	Reference	LT Exp 8 Hrs	ST Exp 15 Min
Lubricating oils (petroleum), base oils, highly refined**(2)	Mixture**(2)	OES.	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>

### Protective equipment



<b>Process conditions</b>	Use engineering controls to reduce air contamination to permissible exposure level.
<b>Ventilation</b>	No specific ventilation requirements noted, but forced ventilation could still be required if air contamination exceeds acceptable level.
<b>Respirators</b>	No specific recommendation made, but respiratory protection could still be required under exceptional circumstances when excessive air contamination exists.
<b>Protective gloves</b>	Chemical-resistant gloves required for prolonged or repeated contact. Use protective gloves made of: Neoprene, nitrile, polyethylene or PVC.
<b>Eye protection</b>	Use eye protection.
<b>Other protection</b>	Wear appropriate clothing to prevent repeated or prolonged skin contact.
<b>Hygienic work practices</b>	Wash at the end of each work shift and before eating, smoking and using the toilet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Grease.		
<b>Colour</b>	Blue.		
<b>Odour</b>	Mild (or faint).		
<b>Solubility description</b>	Insoluble in water.		
<b>Melting/freezing point (°C, interval)</b>	NE		
<b>Density (g/ml)</b>	0.89	<b>Temperature (°C)</b>	4
<b>Vapour density (air=1)</b>	NE		
<b>Vapour pressure</b>	< 0.1 mmHg	<b>Temperature (°C)</b>	20

Evaporation rate	NE	<b>Reference</b>
pH-value, conc. solution	NA	
Odour threshold	NE - NE	
Flash point (°C)	350 F(177 C)	<b>Method</b>
Flammability limit (%)	NE - NE	

## 10. STABILITY AND REACTIVITY

Stability	Normally stable.
Conditions to avoid	Avoid contact with acids and oxidizers.
Hazardous polymerization	Will not polymerize.
Hazardous decomposition products	Acrid smoke/fumes of: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Oxides of: Nitrogen. Sulphur.

## 11. TOXICOLOGICAL INFORMATION

Sensitization	No known information.
Carcinogenicity	IARC Not Listed.
Reproductive toxicity	No known information.
Inhalation	Could cause irritation to the respiratory system.
Ingestion	Could cause stomach pain or vomiting.
Skin	Prolonged or repeated contact leads to drying of skin.
Eyes	Particles in the eyes could cause irritation and smarting.
Route of entry	Inhalation. Skin and/or eye contact. Ingestion.
<b>COMPONENT:</b>	<b>Lubricating oils (petroleum), base oils, highly refined**(2)</b>
Toxicology data	Carcinogenicity. IP 346 <3%
Toxic dose - LD50:	> 5000 mg/kg (oral rat)
Toxic dose - LD50 (skin):	> 2000 mg/kg (skin rabbit)
Toxic conc. - LC50:	No Information Available (NIA).
<b>COMPONENT:</b>	<b>POLYUREA THICKENER</b>
Toxic dose - LD50:	n/a.
Toxic conc. - LC50:	n/a.
<b>COMPONENT:</b>	<b>ALKYL PHOSPHATES, AMINE NEUTRAL</b>
Toxicology data	Corrosive effects.

## 12. ECOLOGICAL INFORMATION

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<b>Ecotoxicity</b>	No data on possible environmental effects have been found.
<b>COMPONENT:</b>	<b>Lubricating oils (petroleum), base oils, highly refined**(2)</b>
<b>COMPONENT:</b>	<b>POLYUREA THICKENER</b>
<b>COMPONENT:</b>	<b>ALKYL PHOSPHATES, AMINE NEUTRAL</b>

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## 13. DISPOSAL CONSIDERATIONS

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<b>Disposal methods</b>	Dispose of in accordance with Local Authority requirements.
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## 14. TRANSPORT INFORMATION

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### ROAD TRANSPORT (ADR):

<b>UN no. road</b>	N/A
<b>ADR class</b>	Not dangerous according to ADR.

### SEA TRANSPORT (IMDG):

<b>Sea transport notes</b>	Not regulated per IMDG.
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### AIR TRANSPORT (IATA/ICAO):

<b>Air transport notes</b>	Not regulated per IATA.
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## 15. REGULATORY INFORMATION

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### HAZARD LABELLING:

<b>Risk phrases</b>	Classification per manufacturer. R-20 Harmful by inhalation. R-22 Harmful if swallowed. R-36/37/38 Irritating to eyes, respiratory system and skin. R-42 May cause sensitization by inhalation. R-52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Xi, Xn
<b>Safety phrases</b>	No safety phrases given.
<b>INVENTORIES:</b>	
<b>CANADA (DSL)</b>	All components in this product are listed on the Canada Domestic Substances List (DSL) or are exempt from DSL requirements.

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<b>EUROPE (EINECS/ELNICS/NLP)</b>	All components in this product are listed on the European Inventory of New and Existing Chemical Substances (EINECS), the European List of Notified Chemical Substances (ELINCS), or the No Longer Polymers (NLP) list, or are exempt from EU listing requirements.
<b>JAPAN (ENCS)</b>	This product contains one or more components that are NOT LISTED on the Japan Inventory of Existing and New Chemical Substances (ENCS) and are NOT EXEMPT from ENCS requirements.
<b>PHILIPPINES (PICCS)</b>	This product contains one or more components that are NOT LISTED on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) and are NOT EXEMPT from PICCS requirements.
<b>USA (TSCA)</b>	All components in this product are listed on the US Toxic Substances Control Act (TSCA) Inventory or are exempt from TSCA Inventory requirements.
<b>AUSTRALIA (AICS)</b>	This product contains one or more components that are NOT LISTED on the Australian Inventory of Chemical Substances (AICS) and are NOT EXEMPT from AICS requirements.
<b>KOREA (ECL)</b>	This product contains one or more components that are NOT LISTED on the Korea Existing Chemicals List (ECL) and are NOT EXEMPT from KECL requirements.
<b>CHINA (IECS)</b>	This product contains one or more components that are NOT LISTED on the China Inventory of Existing Chemical Substances (IECS) and are NOT EXEMPT from IECS requirements.

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## 16. OTHER INFORMATION

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<b>Explanations of R-phrases in Section 2</b>	R-38 Irritating to skin. R-53 May cause long-term adverse effects in aquatic environments. R-36/38 Irritating to eyes and skin.
<b>* Information revised since previous SDS version</b>	
<b>Tariff Code</b>	2710.19.3750 Lubricating greases, with or without additives.
<b>Issued by</b>	Regulatory Department
<b>Replacement of SDS generated</b>	2005-04-08
<b>Date</b>	2009-04-02
<b>Disclaimer</b>	While the information and recommendations set forth herein are believed to be accurate as of the date thereof, The Timken Corporation makes no warranty with respect thereto and disclaims all liability from reliance therein.
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