



SAFETY DATA SHEET

TIMKEN FOOD SAFE GREASE

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Product name	TIMKEN FOOD SAFE GREASE
Product number	GR 231
Applications	Food Machine Grease
Supplier	Chemtool Incorporated P.O. Box 538 8200 Ridgefield Road Crystal Lake, IL 60039-0538 Tel: +01 (815) 459-1250 Fax: +01 (815) 459-1955
Emergency telephones	INFOTRAC U.S. and Canada - (800) 535-5053 Outside the U.S. and Canada - +01-352-323-3500
Date of last issue	2009-04-01

2. COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC no.	CAS no.	Content	Symbol	R-phrases
White mineral oil (petroleum)	232-455-8	8042-47-5	50-70 %	-	
1-DECENE, HOMOPOLYMER, HYDROGENATED	Polymer	68037-01-4	10-20 %	-	
zinc oxide	215-222-5	1314-13-2	7-13 %	N	R-50/53
calcium carbonate	207-439-9	471-34-1	5-10 %	-	
ALUMINUM COMPLEX THICKENER	259-105-7	Proprietary	5-10 %	-	
2,6-di-tert-butyl-p-cresol	204-881-4	128-37-0	0-0.5 %	-	

See section 16 for explanations of R-phrases

Composition comments Refer to section eight for exposure limits on ingredients.
Chemical ingredients not regulated by OSHA or SARA are treated confidentially.

3. HAZARDS IDENTIFICATION

Not regarded as a health hazard under current legislation. Exposure to vapors generated at high temperatures, may cause respiratory irritation. May cause eye irritation.

4. FIRST AID MEASURES

Inhalation	Move the exposed person to fresh air at once. For breathing difficulties oxygen could be necessary. Get medical attention if any discomfort continues.
Ingestion	DO NOT INDUCE VOMITING! Get medical attention immediately!
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eyes	Rinse with water. Contact physician if discomfort continues.

5. FIRE FIGHTING MEASURES

Extinguishing media	Use: Foam. Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc.
Special firefighting procedures	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.
Specific hazards	If heated, volume and pressure increases strongly, resulting in explosion of container.
Hazardous combustion products	Acrid smoke/fumes. Oxides of: Carbon. Sulphur.
Protective measures in the event of fire	Self-contained breathing equipment and chemical resistant clothing recommended.

6. ACCIDENTAL RELEASE MEASURES

Personal protection	Minimize skin contact. Avoid breathing vapors; wear appropriate respirator. Remove sources of ignition. Wear suitable eye protection.
Environmental protection	Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.
Spill clean-up methods	Non-hazardous substance. Collect in containers and seal securely.

7. HANDLING AND STORAGE

Usage precautions	Keep away from heat, sparks and open flame. Eye wash station should be available at the work place.
Storage precautions	Keep away from heat, sparks and open flame. Store separated from: Acids. Oxidizer.
Storage criteria	Storage of chemicals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

Ingredient name	CAS no.	Reference	LT Exp 8 Hrs	ST Exp 15 Min
White mineral oil (petroleum)	8042-47-5	OES.	5 mg/m ³ (Oil mist)	10 mg/m ³ (Oil mist)
zinc oxide	1314-13-2	OES.	5 mg/m ³ resp.dust	10 mg/m ³ total dust
calcium carbonate	471-34-1	OES.	10 mg/m ³	
2,6-di-tert-butyl-p-cresol	128-37-0	OES.	10 mg/m ³	No std.

Protective equipment

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Grease.		
Colour	Light (or pale). White.		
Odour	Mild (or faint).		
Solubility description	Insoluble in water.		
Specific gravity	0.90		
Vapour density (air=1)	> 0.5		
Vapour pressure	< 0.1 mmHg	Temperature (°C)	20 (68°F)
Evaporation rate	< 1	Reference	BuAc=1
pH-value, conc. solution	N/A		
Flash point (°C)	> 100 (212°F)	Method	Cd OC (Cleveland open cup).
Flammability limit (%)	N/D - N/D		

10. STABILITY AND REACTIVITY

Stability	Normally stable.
Conditions to avoid	Avoid contact with acids and oxidizers.
Hazardous polymerization	Will not polymerize.
Hazardous decomposition products	Oxides of: Carbon. Sulphur. Zinc.

11. TOXICOLOGICAL INFORMATION

Sensitization	No known information.
Carcinogenicity	NTP Not Listed. IARC Not Listed. OSHA Not Regulated.
Reproductive toxicity	No known information.
Inhalation	Vapour could irritate respiratory system or lungs.
Ingestion	Harmful if swallowed. Could cause stomach pain or vomiting.
Skin	Repeated or prolonged contact may cause skin irritation.
Eyes	Spray and vapour in the eyes could cause irritation and smarting.
Route of entry	Inhalation. Skin and/or eye contact. Ingestion.
Target organs	Skin. Eyes. Mucous membranes.

COMPONENT: White mineral oil (petroleum)

Toxic dose - LD50:	> 5000 similar mg/kg (oral rat)
Toxic conc. - LC50:	n/a.
Toxicological information	21 CFR 172.878 and 21 CFR 178.3620(a).

COMPONENT: 1-DECENE, HOMOPOLYMER, HYDROGENATED

Toxic dose - LD50:	> 2,000 mg/kg (oral rat)
Toxic dose - LD50 (skin):	> 2,000 mg/kg (skin rabbit)
Toxic conc. - LC50:	> 5 mg/l

COMPONENT: zinc oxide

Toxic dose - LD50:	240 mg/kg (intraperitoneal rat)
Toxic dose - LD50:	7950 mg/kg (oral mouse)
Toxic conc. - LC50:	2500 mg/m ³ (inhalation mammal)

Carcinogenicity OSHA Not Regulated. NTP Not Listed. IARC Not Listed. EPA-D designation: Not classifiable as to human carcinogenicity.

COMPONENT: calcium carbonate

Toxicology data	WHMIS (Canada) Not a Controlled Product
Toxic dose - LD50:	6450 mg/kg (oral rat)
Toxic conc. - LC50:	No Information Available (NIA).
COMPONENT:	ALUMINUM COMPLEX THICKENER
Toxic dose - LD50:	n/a.
Toxic conc. - LC50:	n/a.
COMPONENT:	2,6-di-tert-butyl-p-cresol
Toxic dose - LD50:	1040 mg/kg (oral mouse)
Carcinogenicity	OSHA Not Regulated. NTP Not Listed. IARC-3 designation: Not classifiable as to Carcinogenicity to Humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data on possible environmental effects have been found.
COMPONENT:	White mineral oil (petroleum)
COMPONENT:	1-DECENE, HOMOPOLYMER, HYDROGENATED
COMPONENT:	zinc oxide
Ecotoxicology data	WGK 2
Ecotoxicity	Dangerous for the environment: Could cause long-term adverse effects in the aquatic environment.
COMPONENT:	calcium carbonate
Ecotoxicology data	WGK nwg
COMPONENT:	ALUMINUM COMPLEX THICKENER
COMPONENT:	2,6-di-tert-butyl-p-cresol

13. DISPOSAL CONSIDERATIONS

Disposal methods	Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.
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14. TRANSPORT INFORMATION

ROAD TRANSPORT (ADR):

UN no. road	N/A
ADR class	Not classified for transportation.

SEA TRANSPORT (IMDG):

Sea transport notes Not regulated per IMDG.

AIR TRANSPORT (IATA/ICAO):

Air transport notes Not regulated per IATA.

15. REGULATORY INFORMATION

HAZARD LABELLING:

NC Not classified EM No label required

Risk phrases R-52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

INVENTORIES:

CANADA (DSL) All components in this product are listed on the Canada Domestic Substances List (DSL) or are exempt from DSL requirements.

EUROPE (EINECS/ELNICS/NLP) 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.

JAPAN (ENCS) All components in this product are listed on the Japan Inventory of Existing and New Chemical Substances (ENCS) or are exempt from ENCS requirements.

PHILIPPINES (PICCS) All components in this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or are exempt from PICCS requirements.

USA (TSCA) All components in this product are listed on the US Toxic Substances Control Act (TSCA) Inventory or are exempt from TSCA Inventory requirements.

AUSTRALIA (AICS) All components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or are exempt from AICS requirements.

KOREA (ECL) All components in this product are listed on the Korea Existing Chemicals List (ECL) or are exempt from KECL requirements.

CHINA (IECS) All components in this product are listed on the China Inventory of Existing Chemical Substances (IECS) or are exempt from IECS requirements.

16. OTHER INFORMATION

Explanations of R-phrases in Section 2 R-50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. .Not classified in the Annex I of Directive 67/548/EEC.Not Classified as hazardous per EU Directives.Classification per manufacturer.

*** Information revised since previous SDS version**

Tariff Code 3403.19.0000 Lubricating preparations (including cutting-oil preparations, bolt or nut release preparations, antirust or anticorrosion preparations and mold release preparations, based on lubricants) and preparations of a kind used for the oil or grease treatment of textile materials, leather, furskins or other materials, but excluding preparations containing, as basic constituents, 70 percent or more by weight of petroleum oils or oils obtained from bituminous minerals: Containing petroleum oils or oils obtained from bituminous minerals: Other

Issued by Maria Maka

Date 2009-04-01

Disclaimer While the information and recommendations set forth herein are believed to be accurate as of the date thereof, Chemtool Incorporated makes no warranty with respect thereto and disclaims all liability from reliance therein.

Printing date: 2009-04-16