

SAFETY DATA SHEET

FOOD SAFE GREASE

Section 1. Identification

GHS product identifier	: FOOD SAFE GREASE
Other means of identification	: Not available.
Product type	: Solid.
Product code	: GR231
MSDS #	: 1738
Relevant identified uses of	f the substance or mixture and uses advised against
Product use: For professional use only.	: Industrial applications: Lubricants; grease.
Supplier's details	: The Timken Corporation 4500 Mt. Pleasant St. NW North Canton, OH 44720 U.S.A. 234.262.3000
Emergency telephone number	: INFOTRAC U.S. and Canada - 800.535.5053 Outside the U.S. and Canada - +1 352.323.3500

Section 2. Hazards identification

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the	:	Not classified.
substance or mixture		
		Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 16.3%
GHS label elements		
Hazard pictograms	:	Not applicable.
Signal word	:	No signal word.
Hazard statements	:	No known significant effects or critical hazards.
Precautionary statements		
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Hazards not otherwise classified	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

: Mixture

: Not available.

CAS number/other identifiers

Ingredient name	%	CAS number
White mineral oil (petroleum)	40-70	8042-47-5
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers,	10-30	68037-01-4
hydrogenated zinc oxide	7-13	1314-13-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower Eye contact eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Most important symptoms/effects, acute and delayed

most important symptoms/	mooto, douto and dolayou		
Potential acute health effe	<u>ets</u>		
Eye contact	: No known significant effects or critical hazards.		
Inhalation	: No known significant effects or critical hazards.		
Skin contact	: No known significant effects or critical hazards.		
Ingestion	: No known significant effects or critical hazards.		
<u>Over-exposure signs/sym</u>	<u>otoms</u>		
Eye contact	: No specific data.		
Inhalation	: No specific data.		
Skin contact	: No specific data.		
Ingestion	No specific data.		
Indication of immediate medical attention and special treatment needed, if necessary			
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 		
Specific treatments	: No specific treatment.		
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.		
See toxicological information (Section 11)			

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
Special protective actions for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protec	ive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ntainment and cleaning up
Small spill	: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
White mineral oil (petroleu	 ACGIH TLV (United States, 4/2014). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2013). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 2/2013).
zinc oxide	TWA: 5 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). CEIL: 15 mg/m ³ Form: Dust TWA: 5 mg/m ³ 10 hours. Form: Dust and fumes STEL: 10 mg/m ³ 15 minutes. Form: Fume OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m ³ 8 hours. Form: Fume STEL: 10 mg/m ³ 15 minutes. Form: Fume TWA: 5 mg/m ³ 8 hours. Form: Total dust OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours. Form: Total dust OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours. Form: Total dust OSHA PEL (United States, 4/2014). TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 4/2014). TWA: 2 mg/m ³ 8 hours. Form: Respirable fraction STEL: 10 mg/m ³ 15 minutes. Form:
ppropriate engineering ontrols	 Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
nvironmental exposure ontrols	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
ndividual protection meas	
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is

Section 8. Exposure controls/personal protection

Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance		
Physical state	:	Solid. [grease]
Color	:	White.
Odor	:	Mild. Petroleum oil
Odor threshold	:	Not available.
рН	:	Not applicable.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	0.9 g/cm³
Solubility	:	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acuto	toxicity
Acute	UNICITY

Product/ingredient name	Result	Species		Dos	e	Exposure
White mineral oil (petroleum)	LD50 Oral		Rat		0 mg/kg	-
Conclusion/Summary Irritation/Corrosion	No known significant ef	fects or cri	tical hazards.			
Product/ingredient name	Result	Speci	es Scoi	.e	Exposure	Observation
zinc oxide	Eyes - Mild irritant	Rabbit	t –		24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	t –		24 hours 500 milligrams	-
Conclusion/Summary						
Skin	: No known significant ef	fects or cri	tical hazards.			
Eyes	: No known significant ef	fects or cri	tical hazards.			
Respiratory	: No known significant ef	fects or cri	tical hazards.			
<u>Sensitization</u>						
Conclusion/Summary						
Skin	: No specific information properties of this produced the product of the product					sensitizing
Respiratory	: Sensitization not suspe	cted for hu	mans.			
<u>Mutagenicity</u>						
Conclusion/Summary	: There are no data avail humans.	able on the	e mixture itself	. Mutage	enicity not susp	pected for
Carcinogenicity						
Conclusion/Summary	: There are no data avail humans.	able on the	e mixture itself	. Carcin	ogenicity not s	uspected for
Reproductive toxicity						
Conclusion/Summary	: There are no data avail humans, according to o			. Not co	nsidered to be	dangerous to
Teratogenicity						
Conclusion/Summary	: There are no data avail humans.	able on the	e mixture itself	. Terato	genicity not su	spected for
Specific target organ toxicity	<u> (single exposure)</u>					
Not available.						

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
White mineral oil (petroleum) Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely : Routes of entry anticipated: Oral, Dermal, Inhalation.

routes of exposure

Potential acute health effects

Section 11. Toxicological information

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phy	vsical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Delayed and immediate effect	cts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate	: Not available.
effects	
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate	: Not available.
effects	
Potential delayed effects	: Not available.
Potential chronic health eff	
Conclusion/Summary	: No known significant effects or critical hazards.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
zinc oxide	Acute IC50 1.85 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute IC50 46 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 98 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary : There are no data available on the mixture itself.

Persistence and degradability

Section 12. Ecological information

Conclusion/Summary	: This product has not l degradable.	been tested for biodegradation	n. Not expected to be rapidly
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
FOOD SAFE GREASE	-	-	Not readily
Bioaccumulative potential			
Product/ingredient name	LogPow	BCF	Potential
White mineral oil (petroleum) Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated zinc oxide	>6 >6.5 -	- - 60960	high high high
<u>Mobility in soil</u> Soil/water partition coefficient (K _{oc})	: Not available.		
Other adverse effects	: No known significant	effects or critical hazards.	

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
	sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 14. Transport information

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

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U.S. Federal regulations	:	TSCA 8	(a) PAIR: dip	henylami	ne			
		TSCA 8	(a) CDR Exe	mpt/Part	ial exemptior	n: Not determi	ned	
		United S	States inven	tory (TSC	CA 8b): All cor	mponents are	listed or exemp	oted.
		Clean W	ater Act (C)	NA) 307 :	zinc oxide			
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	:	Not liste	d					
Clean Air Act Section 602 Class I Substances	:	Not liste	d					
Clean Air Act Section 602 Class II Substances	:	Not liste	d					
DEA List I Chemicals (Precursor Chemicals)	:	Not liste	d					
DEA List II Chemicals (Essential Chemicals)	:	Not liste	d					
<u>SARA 302/304</u>								
Composition/information	on	ingredier	<u>nts</u>					
No products were found.								
SARA 304 RQ	:	Not appl	licable.					
<u>SARA 311/312</u>								
Classification	:	Not appl	licable.					
Composition/information	on	ingredier	<u>nts</u>					
Name			%	Fire hazard	Sudden release of	Reactive	Immediate (acute)	Delayed (chronic

Name		hazard	Sudden release of pressure		(acute)	Delayed (chronic) health hazard
zinc oxide	7-13	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	zinc oxide	1314-13-2	7-13
Supplier notification	zinc oxide	1314-13-2	7-13

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Connecticut Carcinogen Reporting

Connecticut Hazardous Material Survey

Florida substances

- : None of the components are listed.
- : None of the components are listed.
- : None of the components are listed.

Validated on 6/19/2015.

Section 15. Regulatory information

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Illinois Chemical Safety Act	: None of the components are listed.
Illinois Toxic Substances Disclosure to Employee	: None of the components are listed.
Act	
Louisiana Reporting	: None of the components are listed.
Louisiana Spill	: None of the components are listed.
Massachusetts Spill	: None of the components are listed.
Massachusetts Substances	 The following components are listed: ZINC OXIDE FUME; CALCIUM CARBONATE
Michigan Critical Material	: None of the components are listed.
Minnesota Hazardous Substances	: None of the components are listed.
New Jersey Spill	: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act	: None of the components are listed.
New Jersey Hazardous Substances	 The following components are listed: ZINC OXIDE; CALCIUM CARBONATE; LIMESTONE
New York Acutely Hazardous Substances	: None of the components are listed.
New York Toxic Chemical Release Reporting	: None of the components are listed.
Pennsylvania RTK Hazardous Substances	 The following components are listed: ZINC OXIDE (ZNO); LIMESTONE
Rhode Island Hazardous Substances	: None of the components are listed.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	•	•	Maximum acceptable dosage level
crystalline silica, non-respirable	Yes.	No.	No.	No.

International regulations

<u>Chemical Weapon Convention List Schedules I, II & III Chemicals</u> Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

International lists

National inventory	
Australia	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: All components are listed or exempted.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
<u>Canada</u>	
WHMIS (Canada)	: Class D-2A: Material causing other toxic effects (Very toxic).
Canadian lists	
Canadian NPRI	: The following components are listed: Zinc (and its compounds)

Validated on 6/19/2015.

Section 15. Regulatory information

CEPA Toxic substances

: None of the components are listed.

Canada inventory: DSL/

: At least one component is not listed in DSL but all such components are listed in NDSL. NDSL

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History	
Date of issue/Date of revision	: 6/19/2015
Date of previous issue	: 5/14/2015
Version	: 2
	Regulatory Department, Chemtool Inc.
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Histowy

Section 16. Other information

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.