Material Safety Data Sheet



Revision Number: 001.2

1. PRODUCT AND COMPANY IDENTIFICATION			
Product name: NSWC100, 6 o Product type: Thermal grease Company address: Henkel Corporation 15350 Barranca Parkway Irvine, CA 92618	z Semco IDH number: 1112951		
2. HAZARDS IDENTIFICATION			
Physical state: Paste Color: White Odor: Odorless CAUTION: M	EMERGENCY OVERVIEW <u>HMIS:</u> HEALTH: *1 FLAMMABILITY: 0 PHYSICAL HAZARD: 0 Personal Protection: See MSDS Section 8 AY CAUSE EYE AND SKIN IRRITATION.		
Relevant routes of exposure: <u>Potential Health Effects</u>	Eye contact, Skin contact		
Inhalation: Skin contact: Eye contact: Ingestion:	Not expected under normal conditions of use. Prolonged or repeated contact may cause irritation. May cause irritation. Not expected under normal conditions of use.		
Existing conditions aggravated by exposure:	Eye disorders. Skin disorders.		
	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).		

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%	
Zinc oxide	1314-13-2	60 - 100	
Ethoxylated p-nonyl phenol	26027-38-3	5 - 10	
Polyglycol	Proprietary	5 - 10	
Substituted polyol	Proprietary	1 - 5	
Polyoxyalkylene	Proprietary	1 - 5	

4. FIRST AID MEASURES

Inhalation:

Skin contact:

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.

Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). Wash clothing before reuse. Thoroughly clean shoes before reuse. If symptoms develop and persist, get medical attention.

Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion:	Never give anything by mouth to an unconscious person. If symptoms develop and persist, get medical attention.
5. F	IRE FIGHTING MEASURES
Flash point:	296 °C (564.8 °F) Cleveland open cup
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Extinguishing media:	Carbon dioxide, foam, powder
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
Unusual fire or explosion hazards:	None
Hazardous combustion products:	Oxides of carbon.
6. ACCIDENTAL RELEASE MEASURES	

Environmental precautions:	Do not allow product to enter sewer or waterways.
Clean-up methods:	Ensure adequate ventilation. Scrape up spilled material and place in a closed container for disposal.
7. HANDLING AND STORAGE	

Handling:

Storage:

Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Avoid breathing vapors or mists of this product. Keep

container closed. Wash thoroughly after handling.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Zinc oxide	2 mg/m3 TWA Respirable fraction. 10 mg/m3 STEL Respirable fraction.	5 mg/m3 TWA Fume. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust.	None	None
Ethoxylated p-nonyl phenol	None	None	None	None
Polyglycol	None	None	None	None
Substituted polyol	None	None	None	None
Polyoxyalkylene	None	None	None	None

Engineering controls:

Respiratory protection:

Eye/face protection:

Skin protection:

Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.

Use NIOSH approved respirator if there is potential to exceed exposure $\ensuremath{\mathsf{limit}}(s).$

Safety goggles or safety glasses with side shields.

Chemical resistant, impermeable gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content:

Paste White Odorless Not available Not available < 0.1 mm hg > 149 °C (> 300.2 °F) Not available 2.7 Not available 296 °C (564.8 °F) Cleveland open cup Not available Not available Not available < 0.01 (Butyl acetate = 1) Partially soluble Not available Not available

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	None known
Incompatible materials:	Strong oxidizing agents.
Conditions to avoid:	Store away from incompatible materials. Heat, flames, sparks and other sources of ignition.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Zinc oxide	No	No	No
Ethoxylated p-nonyl phenol	No	No	No
Polyglycol	No	No	No
Substituted polyol	No	No	No
Polyoxyalkylene	No	No	No

Hazardous components	Health Effects/Target Organs
Zinc oxide	Blood, Gastrointestinal, Immune system, Irritant, Kidney, Metabolic, Nervous System, Pancreas, Respiratory, Skin
Ethoxylated p-nonyl phenol	Irritant, Skin
Polyglycol	No Target Organs
Substituted polyol	Irritant
Polyoxyalkylene	No Records

12. ECOLOGICAL INFORMATION		
Ecological information:	Not available	
	13. DISPOSAL CONSIDERATIONS	
Information provided is for unused product only.		
Recommended method of disposal:	Follow all local, state, federal and provincial regulations for disposal.	
Hazardous waste number:	Not a RCRA hazardous waste.	
14. TRANSPORT INFORMATION		
The shipping classifications in this secti be different for bulk packaging.	ons are for non-bulk packaging only (unless otherwise specified). Shipping classification may	
U.S. Department of Transportation G Proper shipping name: Hazard class or division: Identification number: Packing group:	round (49 CFR) Not regulated None None None	
International Air Transportation (ICA) Proper shipping name: Hazard class or division: Identification number: Packing group:	O/IATA) Environmentally hazardous substance, liquid, n.o.s. (Zinc oxide) 9 UN 3082 III	
Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group: Marine pollutant:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc oxide) 9 UN 3082 III Zinc oxide	
	15. REGULATORY INFORMATION	
United States Regulatory Information		
TSCA 8 (b) Inventory Status: TSCA 12(b) Export Notification:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. None above reporting de minimus	
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA 313:	None above reporting de minimus Immediate Health This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Zinc oxide (CAS# 1314-13-2).	
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.	
Canada Regulatory Information		
CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic	
WHMIS hazard class:	Substances List. D.2.B	
	16. OTHER INFORMATION	

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

Prepared by: Dan Shaw, Regulatory Affairs Specialist

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.