

MATERIAL SAFETY DATA SHEET

"TIMKEN ULTRA-HIGH SPEED SPINDLE GREASE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

EMERGENCY CONTACT

INFOTRAC
Emergency Response Hotline
1-800-535-5053 (US & Canada)

2. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT NAME	'CAS No0	WEIGHT
1-DECENE, TETRAMER, MIXED WITH 1-DECENE TRIMER, HYDROGENATED (COMMON NAME: POLYALPHAOLEFINS)	68649-12-7	30-50 %
FATTY ACIDS, C5-C10, ESTERS WITH PENTAERYTHRITOL	68424-31-7	10-30 %
1-DECENE, HOMOPOLYMER, HYDROGENATED (COMMON NAME: POLYALPHAOLEFINS)	68037-01-4	10-30 %
POLYUREA THICKENER (PROPRIETARY INGREDIENT# 28327)	Proprietary	10-30 %
*ALKYL PHOSPHATES, AMINE NEUTRAL (PROPRIETARY INGREDIENT# 28324)	Proprietary	1-5 %

* This chemical(s) is hazardous according to OSHA/WHIMIS criteria

COMPOSITION COMMENTS

Refer to section eight for exposure limits on ingredients.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

ACUTE EFFECTS

HEALTH HAZARDS, GENERAL

Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin, or respiratory irritation.

CHRONIC EFFECTS

HEALTH WARNINGS

OTHER INFORMATION

MEDICAL INFORMATION For further health effects / toxicological data, see Section 11.

4. FIRST AID MEASURES

INHALATION Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with mechanical device or use mouth-to-mouth resuscitation.

EYES Flush thoroughly with water. If irritation occurs, call a physician.

SKIN Wash skin thoroughly with soap and water.

INGESTION Not expected to be a problem. Seek medical attention if discomfort occurs. Do not induce vomiting.

5. FIRE FIGHTING MEASURES

FLASH POINT (°C) > 204 Cd OC (Cleveland open cup).

FLAMMABILITY LIMIT - LOWER(%) NE

FLAMMABILITY LIMIT - UPPER(%) NE

EXTINGUISHING MEDIA Carbon dioxide, foam, dry chemical, and water fog.

SPECIAL FIRE FIGHTING PROCEDURES Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

UNUSUAL FIRE & EXPLOSION HAZARDS No unusual fire or explosion hazards noted.

HAZARDOUS COMBUSTION PRODUCTS Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

PROTECTIVE MEASURES IN CASE OF FIRE For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS See section 8.

PRECAUTIONS TO PROTECT THE ENVIRONMENT Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil / vegetation.

SPILL CLEAN-UP PROCEDURES Contain spill. Absorb small amounts. Collect and return large amounts to shipping container.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact.

HANDLING DESCRIPTION Prevent small spills and leakages to avoid slip hazard.

STORAGE PRECAUTIONS Store separated from: Acids. Oxidizing materials.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

INGREDIENT COMMENTS This product does not contain any components which have recognized exposure limits.

VENTILATION Use adequate ventilation.

RESPIRATORS No special requirements under ordinary conditions of use and with adequate ventilation.

EYE PROTECTION Generally eye contact is unlikely with this type of material. If eye contact is likely, safety glasses with side shields or chemical type goggles should be worn.

PROTECTIVE CLOTHING If prolonged or repeated skin contact is likely, oil impervious gloves should be worn. Good personal hygiene practices should always be followed.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE Grease.

COLOR Light (or pale). Amber. Yellow.

ODOR Mild (or faint).

PHYSICAL DATA COMMENTS Most physical properties for oil component.

SOLUBILITY VALUE (g/100g H₂O 20°C) Negligible

DENSITY	~ 0.89	Temperature (°C)	16
VAPOR PRESSURE	< 0.1 mmHg	Temperature (°C)	20

10. STABILITY AND REACTIVITY

STABILITY Normally stable.

CONDITIONS TO AVOID Extreme heat and high energy sources of ignition.

HAZARDOUS POLYMERIZATION Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS Not known.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION No experimental toxicological data on the preparation as such is available.

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION	This environmental assessment was conducted using information on the individual components as no test data was available for this specific formulation.
ACUTE AQUATIC TOXICITY	Not determined.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS	Dispose of in accordance with Local Authority requirements.
WASTE CLASSIFICATION	Not a hazardous waste.

14. TRANSPORT INFORMATION

DOT HAZARD CLASS	Non-Hazardous (No label required).
SEA TRANSPORT NOTES	Not regulated.
AIR TRANSPORT NOTES	Not regulated.

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

COMPONENT	SARA 302	CERCLA	SARA 313
1-DECENE, TETRAMER, MIXED WITH 1-DECENE TRIMER, HYDROGENATED (COMMON NAME: POLYALPHAOLEFINS)	N/A	N/A	N/A
FATTY ACIDS, C5-C10, ESTERS WITH PENTAERYTHRITOL	N/A	N/A	N/A
1-DECENE, HOMOPOLYMER, HYDROGENATED (COMMON NAME: POLYALPHAOLEFINS)	N/A	N/A	N/A
POLYUREA THICKENER (PROPRIETARY INGREDIENT# 28327)	N/A	N/A	N/A
ALKYL PHOSPHATES, AMINE NEUTRAL (PROPRIETARY INGREDIENT# 28324)	N/A	N/A	N/A

CLEAN AIR ACT

US STATE REGULATIONS

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHIMIS

COMPONENT	INVENTORIES						
	CAN	US	EU	AUS	JAP	KOR	CHN

FATTY ACIDS, C5-C10, ESTERS WITH PENTAERYTHRITOL	No	Yes	No	No	No	No	No	No
1-DECENE, HOMOPOLYMER, HYDROGENATED (COMMON NAME: POLYALPHAOLEFINS)	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
POLYUREA THICKENER (PROPRIETARY INGREDIENT# 28327)	No	No	No	No	No	No	No	No
ALKYL PHOSPHATES, AMINE NEUTRAL (PROPRIETARY INGREDIENT# 28324)	DSL	Yes	EINECS	Yes	No	No	No	Yes
1-DECENE, TETRAMER, MIXED WITH 1-DECENE TRIMER, HYDROGENATED (COMMON NAME: POLYALPHAOLEFINS)	DSL	Yes	EINECS	Yes	Yes	No	No	No

16. OTHER INFORMATION

HEALTH	No health hazards specifically noted for fire situations (0). - HMIS/NFPA
FLAMMABILITY	Burns only if pre-heated (1) - HMIS/NFPA
REACTIVITY	Normally Stable (0) - HMIS/NFPA
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DISCLAIMER	While the information and recommendations set forth herein are believed to be accurate as of the date thereof, The Timken Company makes no warranty with respect thereto and disclaims all liability from reliance therein.