

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Supersedes:08/28/2014 Revision date: 11/11/2014

Keviolen	
SECTION 1: Identification of the sub	ostance/mixture and of the company/undertaking
1.1. Product identifier	
Trade name	: P100-32D PAG Refrigeration Lubricant 100 + UV Dye
Product code	: P100-32D
1.2. Relevant identified uses of the subs	stance or mixture and uses advised against
Use of the substance/mixture	: Polyalkylene Glycol based lubricant with ultraviolet leak detection dye to help detect leaks i conditioning systems.
1.3. Details of the supplier of the safety	data sheet
Tire Seal, Inc. 3574 Corona Street 33461 Lake Worth, Florida - USA T 561-582-2245 - F 561-582-1499 www.supercool.ac	
1.4. Emergency telephone number	
Emergency number	: USA PHONE:1-800-373-7542, INT'L: 1-484-951-2432 DGA/AAG ENVIRONMENTAL CONTRACT: DGA4000-048
SECTION 2: Hazards identification	
2.1. Classification of the substance or n	nixture
Classification (GHS-US) Not classified	
2.2. Label elements	
GHS-US labeling	
No labeling applicable	
2.3. Other hazards	
No additional information available	
2.4. Unknown acute toxicity (GHS-US)	
No data available	
SECTION 3: Composition/information	n on ingredients
3.1. Substance	
Not applicable	
Full text of H-phrases: see section 16	
3.2. Mixture	
Name	Product identifier % Classification (GHS-US)
2,6-di-tert-butyl-p-cresol	(CAS No) 128-37-0 0.1 - 1 Acute Tox. 4 (Oral), H302
SECTION 4. Einst sid massaures	
SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followe by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effect	cts, both acute and delayed
Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Indication of any immediate medica	Il attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	Ecom Dry pourder Carbon diguide Water array Cand
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

Version: 2.1

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.2. Special hazards arising from the s	ubstance or mixture
No additional information available	
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release me	asures
	equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Not	ify authorities if liquid enters sewers or public waters. Avoid release to the environment.
6.3. Methods and material for containr	nent and cleaning up
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Colle spillage. Store away from other materials.
6.4. Reference to other sections	
See Heading 8. Exposure controls and person	al protection.
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
7.2. Conditions for safe storage, inclue	ling any incompatibilities
Storage conditions	: Keep container closed when not in use.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/per	sonal protection
8.1. Control parameters	
2,6-di-tert-butyl-p-cresol (128-37-0)	
USA ACGIH ACGIH TWA	(mg/m ³) 2 mg/m ³
8.2. Exposure controls	
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: The use of gloves impervious to the specific material handled is advised to prevent skin contact. Suggested protective material: Nitrile, 4.5 mil thickness, tested at 3.5 ml and above with no breakthrough time after 240 minutes.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: Normally not required. Where there is potential for airborne exposure above the exposure limit an approved air purifying respirator equipped with Type R or P95 particle filters may be used.
Other information	: Do not eat, drink or smoke during use.
SECTION 9: Physical and chemical	properties
9.1. Information on basic physical and	chemical properties
Physical state	: Liquid
Appearance	: Clear.
Color	: Reddish Green Tint.
Odor	: Characteristic.
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
11/11/2014	EN (English US) 2/5

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	-	
Freezing point	:	No data available
Boiling point	:	> 200 °C Calculated
Flash point	:	204 °C Closed Cup
Self ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	84 - 106 cSt @40°C
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosive limits	:	No data available

9.2. **Other information**

No additional information available

SECT	ION 10: Stability and reactivity		
10.1.	Reactivity		
No additional information available			
10.2.	Chemical stability		
Not established.			
10.3.	Possibility of hazardous reactions		
Not established.			
10.4.	Conditions to avoid		
Direct sunlight. Extremely high or low temperatures.			
10.5.	Incompatible materials		
Strong a	acids. Strong bases.		
10.6.	Hazardous decomposition products		

Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects	
Acute toxicity	: Not classified
2,6-di-tert-butyl-p-cresol (128-37-0)	
LD50 oral rat	890 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; >6000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; OECD 402: Acute Dermal Toxicity; >2000 mg/kg bodyweight; Rat; Experimental value)
ATE (oral)	890.000 mg/kg body weight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
2,6-di-tert-butyl-p-cresol (128-37-0)	
IARC group	3
Reproductive toxicity	: Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met
Aspiration hazard	: Based on available data, the classification criteria are not met

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Potential Adverse human health effects and : Based on available data, the classification criteria are not met. symptoms

Symptoms			
SECTION 12: Ecological informatic	on and a second s		
12.1. Toxicity			
Ecology - water	: Toxic to aquatic life.		
2,6-di-tert-butyl-p-cresol (128-37-0)			
LC50 fish 1	0.199 mg/l (96 h; Pisces)		
EC50 Daphnia 1	0.48 mg/l (48 h; Daphnia magna; GLP)		
Threshold limit algae 1	> 0.4 mg/l (72 h; Scenedesmus subspicatus; GLP)		
Threshold limit algae 2	0.363 mg/l (Algae; Chronic)		
I2.2. Persistence and degradability			
P100-32D PAG Refrigeration Lubricant 10	0 + UV Dye		
Persistence and degradability	Not established.		
tricresyl phosphates, mixture of isomers,	conc o-tricresyl phosphate>95% (1330-78-5)		
Persistence and degradability	Readily biodegradable in water.		
2,6-di-tert-butyl-p-cresol (128-37-0)			
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil. Adsorbs into the soil. Low potential for mobility in soil. Photooxidation in the air.		
Biochemical oxygen demand (BOD)	0.51 g O ² /g substance		
Chemical oxygen demand (COD)	2.27 g O ² /g substance		
ThOD	2.977 g O ² /g substance		
BOD (% of ThOD)	0.17 % ThOD		
2.3. Bioaccumulative potential			
P100-32D PAG Refrigeration Lubricant 10	0 + UV Dye		
Bioaccumulative potential	Not established.		
tricresyl phosphates, mixture of isomers,	conc o-tricresyl phosphate>95% (1330-78-5)		
Log Pow	5.11 (Experimental value)		
2,6-di-tert-butyl-p-cresol (128-37-0)			
BCF fish 1	230 - 2500 (56 days; Cyprinus carpio)		
Log Pow	5.1 (Experimental value)		
Bioaccumulative potential	Potential for bioaccumulation ($500 \le BCF \le 5000$).		
12.4. Mobility in soil			
2,6-di-tert-butyl-p-cresol (128-37-0)			
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.		
12.5. Other adverse effects			
Other information	: Avoid release to the environment.		
SECTION 13: Disposal consideration	ons		
3.1. Waste treatment methods			
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.		
Ecology - waste materials	: Avoid release to the environment.		
SECTION 14: Transport information			
In accordance with ADR / RID / IMDG / IATA / ADN			
14.1. UN number			
Not applicable			
14.2. UN proper shipping name			
Not applicable			
14.3. Additional information	. Na supplementary information conflicts		
Other information	: No supplementary information available.		
Overland transport			
Not regulated			
Transport by sea			
Not regulated			

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

according to Federal Register / Vo	I. 77, No. 587 Monday, March 2	26, 2012 / Rules and Regulations			
Air transport					
Not regulated					
SECTION 15: Regulat					
15.1. US Federal regulation					
No additional information ava	ailable				
15.2. International regulation	ons				
CANADA					
P100-32D PAG Refrigerat	ion Lubricant 100 + UV D	уе			
WHMIS Classification	Cla	ass D Division 2 Subdivision B	 Toxic material causing other to: 	xic effects	
EU-Regulations					
No additional information ava	ailable				
Classification according to	Regulation (EC) No. 127	2/2008 [CLP]			
STOT SE 2 H371 Aquatic Chronic 3 H412	0 ()				
Full text of H-phrases: see se	ection 16				
Classification according to	Directive 67/548/EEC or	1999/45/EC			
15.2.2. National regulation	ons				
No additional information ava	ailable				
15.3. US State regulations					
P100-32D PAG Refrigeration		e()			
U.S California - Proposition 65 - Carcinogens List No					
U.S California - Proposition 65 - Developmental Toxicity		No			
U.S California - Proposition 65 - Reproductive Toxicity - Female		No			
U.S California - Proposition 65 - Reproductive Toxicity - Male		No			
tricresyl phosphates, mixt	ure of isomers, conc o-tric	resyl phosphate>95% (1330-7	8-5)		
U.S California -	U.S California -	U.S California -	U.S California -	No significance risk level	
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)	
No	No	No	No		
2,6-di-tert-butyl-p-cresol (1			I	1	
U.S California -	U.S California -	U.S California -	U.S California -	No significance risk level	
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)	
No	No	No	No		

SECTION 16: Other information

Other information

: None.

Full text of H-phrases: see section 16:

Γ	Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
	H302	Harmful if swallowed

NFPA health hazard	 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	: 1 - Must be preheated before ignition can occur.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



SDS US (GHS HazCom 2012) - TSI

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