P150-32 PAG Refrigeration Lubricant 150

Safety Data Sheet

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

Revision date: 11/11/2014 Supersedes:08/28/2014 Version: 2.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : P150-32 PAG Refrigeration Lubricant 150

Product code : P150-32

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Polyalkylene Glycol based lubricant for use in air 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 mixture

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 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: 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, followed 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 effects, 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 medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

sSuitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance 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 measures

6.1. Personal precautions, protective 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. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal 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, including 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/personal protection

8.1. Control parameters

2,6-di-tert-butyl-p-cresol (128-37-0)		
USA ACGIH	ACGIH TWA (mg/m³)	2 mg/m³

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 : Where there is potential for airborne exposure above the exposure limit an approved air purifying respirator equipped with Type P2 - Medium efficiency 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 : Colorless to Yellowish.

Odor : Characteristic.

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

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	:	124 - 139 cSt @40ºC
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

SECTION 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 acids. Strong bases.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

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
3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexylcarboxylate (2386-87-0)	
LD50 oral rat	4490 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 5000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 20 mg/l/4h (Rat)
ATE (oral)	4490.000 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
Potential Adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

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)
3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexylcarboxylate (2386-87-0)	
LC50 fish 1	24 mg/l (96 h; Oncorhynchus mykiss; GLP)
EC50 Daphnia 1	40 mg/l (48 h; Daphnia magna; GLP)
Threshold limit algae 1	> 110 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)

12.2. Persistence and degradability

P150-32 PAG Refrigeration Lubricant 150	
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
3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexylcarboxylate (2386-87-0)	
Persistence and degradability	Readily biodegradable in water. Biodegradability in soil: no data available. Low potential for adsorption in soil. Highly mobile in soil.
ThOD	2.16 g O^2/g substance

12.3. Bioaccumulative potential

P150-32 PAG Refrigeration Lubricant 150	
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 ≤ BCF ≤ 5000).
3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexylcarboxylate (2386-87-0)	
Log Pow	1.34 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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 considerations

13.1. Waste treatment methods

Waste disposal recommendations : Disposal should be made in accordance with federal, state and local 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

Other information : No supplementary information available.

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

P150-32 PAG Refrigeration Lubricant 150	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

15.2.2. National regulations

No additional information available

15.3. US State regulations

P150-32 PAG Refrigeration Lubricant 150()	
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, mixture of isomers, conc o-tricresyl phosphate>95% **(1330-78-5)**				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

2,6-di-tert-butyl-p-cresol (128-37-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexylcarboxylate (2386-87-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

SECTION 16: Other information

Other information : None.

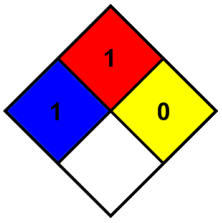
Full text of H-phrases: see section 16:

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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