SAFETY DATA SHEET



MAX GEAR SAE 85W-140

Section 1. Identification

GHS product identifier : MAX GEAR SAE 85W-140

Product code : 301146175115

Other means of : Not available.
identification

Product type : Liquid.

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

Identified uses		
Consumer products: Lubricating Oil Industrial applications: Lubricating Oil		
Uses advised against	Reason	
None known.		

Supplier's details : Calumet Branded Products, LLC

2780 Waterfront Pkwy E. Drive Suite 200

Indianapolis, IN 46214

USA

Technical Services:317-328-5660

24hr. CHEMTREC 1-800-424-9300 /

International 1-703-527-3887

: 24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: SKIN SENSITIZATION - Category 1 AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity:

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity:

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 18.7%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 16.1%

GHS label elements

Hazard pictograms



Signal word : Warning

Hazard statements : May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed,

have product container or label at hand.

Date of issue/Date of revision : 01/03/2020 Version : 4 1/14

Section 2. Hazards identification

: Wear protective gloves. Avoid release to the environment. Avoid breathing vapor.

Contaminated work clothing must not be allowed out of the workplace.

Response : IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before

reuse. If skin irritation or rash occurs: Get medical attention.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

: Mixture

: Not available.

Ingredient name	%	CAS number
Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	≥25 - ≤50	9003-29-6
Distillates (petroleum), hydrotreated heavy paraffinic	≥10 - ≤25	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤5	64742-65-0
Distillates (petroleum), solvent-dewaxed light paraffinic	≤5	64742-56-9
Distillates (petroleum), hydrotreated light paraffinic	≤5	64742-55-8
Polysulfides, di-tert-Bu	≤5	68937-96-2
Reaction Products of Diphosphorus Pentaoxide with Alcohols, C14-18 even, salted with Amines, C12-14, Tert-Alkyl	≤1.7	943-540-0
Distillates (petroleum), hydrotreated heavy paraffinic	≤2.3	64742-54-7
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	≤2.1	72623-86-0
White mineral oil (petroleum)	≤2.1	8042-47-5
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated.esterfied with diphosphorus pentaoxide and salted by amines c12-14-tert-alkyl	≤3	-
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	≤0.079	95-38-5

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

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Date of issue/Date of revision : 01/03/2020 Version : 4 2/14

Section 4. First aid measures

Ingestion

Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

Skin contact: May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

: Do not use water jet.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides sulfur 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.

Date of issue/Date of revision : 01/03/2020 Version : 4 3/14

Section 5. Fire-fighting measures

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, protective 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized 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 nonemergency 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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. See Section 10 for incompatible materials before handling or use.

Date of issue/Date of revision 4/14 : 01/03/2020 Version: 4

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Sutene, homopolymer (products derived from either/or But-1-ene/But-	None.
2-ene) Distillates (petroleum), hydrotreated heavy paraffinic	ACGIH TLV (United States, 3/2019). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. NIOSH REL (United States, 10/2016).
Distillates (petroleum), solvent-dewaxed heavy paraffinic	TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist ACGIH TLV (United States, 3/2019). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. NIOSH REL (United States, 10/2016).
Distillates (petroleum), solvent-dewaxed light paraffinic	TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist ACGIH TLV (United States, 3/2019). TWA: 5 mg/m³ 8 hours. Form: Inhalable
Distillates (petroleum), hydrotreated light paraffinic Polysulfides, di-tert-Bu	fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist ACGIH TLV (United States, 3/2019). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist None.
Reaction Products of Diphosphorus Pentaoxide with Alcohols, C14-18 even, salted with Amines, C12-14, Tert-Alkyl	None.
Distillates (petroleum), hydrotreated heavy paraffinic	ACGIH TLV (United States, 3/2019). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	ACGIH TLV (United States, 3/2019). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist
White mineral oil (petroleum)	OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 3/2019).
Date of issue/Date of revision : 01/03/2020	Version : 4 5/14

Date of issue/Date of revision : 01/03/2020 Version : 4 5/14

Section 8. Exposure controls/personal protection

TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction

NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist

None.

None.

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated.esterfied with diphosphorus pentaoxide and salted by amines c12-14-tert-alkyl

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol

Appropriate engineering controls

Environmental exposure controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : 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.

Individual protection measures

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. Contaminated work clothing should not be allowed out of the workplace. 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 sideshields.

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 necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. Color : Purple. : Not available. Odor Not available. **Odor threshold**

pН : Not available. **Melting point** : Not available. **Boiling point** Not available.

Date of issue/Date of revision 6/14 : 01/03/2020 Version: 4

Section 9. Physical and chemical properties

: Open cup: 191°C (375.8°F) [Cleveland.] Flash point

Evaporation rate : Not available. Flammability (solid, gas) : Not available. Lower and upper explosive : Not available.

(flammable) limits

: Not available. Vapor pressure Vapor density : Not available. **Relative density** : 0.8947

Solubility : Insoluble in the following materials: cold water and hot water.

: Not available. Solubility in water Partition coefficient: n-

octanol/water

: Not available.

: Not available. **Auto-ignition temperature Decomposition temperature** : Not available.

: Kinematic (40°C (104°F)): 2.84 cm²/s (284 cSt) **Viscosity**

Flow time (ISO 2431) : Not available.

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

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sutene, homopolymer (products derived from either/ or But-1-ene/But-2-ene)	LD50 Dermal	Rabbit	>10250 mg/kg	-
,	LD50 Oral	Rat	>34600 mg/kg	_
Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	5.7 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	>5.53 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), solvent-dewaxed light paraffinic	LD50 Dermal	Rabbit	>5000 mg/kg	-
•	LD50 Dermal	Rat	>2000 mg/kg	-

Date of issue/Date of revision : 01/03/2020 7/14 Version: 4

Section 11. Toxicological information

	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum),	LC50 Inhalation Dusts and mists	Rat	>5.53 mg/l	4 hours
hydrotreated light paraffinic				
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum),	LC50 Inhalation Dusts and mists	Rat	>5.53 mg/l	4 hours
hydrotreated heavy paraffinic				
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Lubricating oils (petroleum),	LC50 Inhalation Dusts and mists	Rat	>5.53 mg/l	4 hours
C15-30, hydrotreated neutral				
oil-based				
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
White mineral oil (petroleum)	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Butene, homopolymer (products derived from either/or But-1-ene/But-	ASPIRATION HAZARD - Category 1
2-ene)	
Distillates (petroleum), solvent-dewaxed light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Date of issue/Date of revision : 01/03/2020 Version : 4 8/14

Section 11. Toxicological information

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

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

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
MAX GEAR SAE 85W-140	39875.9	7730.6	N/A	N/A	N/A
Distillates (petroleum), hydrotreated heavy paraffinic	N/A	2500	N/A	N/A	5.7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	N/A	2500	N/A	N/A	N/A
Distillates (petroleum), solvent-dewaxed light paraffinic	N/A	2500	N/A	N/A	N/A
Distillates (petroleum), hydrotreated light paraffinic	N/A	2500	N/A	N/A	N/A
Distillates (petroleum), hydrotreated heavy paraffinic	N/A	2500	N/A	N/A	N/A
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	N/A	2500	N/A	N/A	N/A
White mineral oil (petroleum)	N/A	2500	N/A	N/A	N/A
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated.esterfied with diphosphorus pentaoxide and salted by amines c12-14-tert-alkyl	500	N/A	N/A	N/A	N/A
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	500	N/A	N/A	N/A	N/A

Date of issue/Date of revision : 01/03/2020 Version : 4 9/14

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute IC50 >100 mg/l	Algae	72 hours
	Acute LC50 >100 mg/l	Fish	96 hours
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
	Chronic NOEL >1 mg/l	Daphnia	21 days
Distillates (petroleum), hydrotreated light paraffinic	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
Polysulfides, di-tert-Bu	EC50 >100 mg/l	Algae	3 days
	EC50 63 mg/l	Daphnia	2 days
Reaction Products of Diphosphorus Pentaoxide with Alcohols, C14-18 even, salted with Amines, C12-14, Tert-Alkyl	EC50 8.3 mg/l	Daphnia	2 days
	NOEC 0.32 mg/l	Aquatic plants	3 days
Distillates (petroleum), hydrotreated heavy paraffinic	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
	Chronic NOEL >1 mg/l	Daphnia	21 days
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
White mineral oil (petroleum)	Acute LC50 >100 mg/l	Daphnia	48 hours
(1 -1-2)	Acute LC50 >10000 mg/l	Fish	96 hours

Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
Polysulfides, di-tert-Bu Reaction Products of	OECD 301B Ready Biodegradability - CO ₂ Evolution Test OECD 301B	13 % - Not readily - 24 % - 28 days	28 days	-	-
Diphosphorus Pentaoxide with Alcohols, C14-18 even, salted with Amines, C12-14, Tert-Alkyl	Ready Biodegradability - CO ₂ Evolution Test				
Product/ingredient name	Aquatic half-life		Photolysis	;	Biodegradability
Tutene, homopolymer (products derived from either/ or But-1-ene/But-2-ene)	-		-		Readily
Distillates (petroleum), hydrotreated heavy paraffinic	-		-		Not readily
Distillates (petroleum), hydrotreated light paraffinic	-		-		Inherent
Polysulfides, di-tert-Bu Reaction Products of	- -		- -		Not readily Inherent
Date of issue/Date of revision	: 01/03/2020				Version : 4 10/14

Date of issue/Date of revision : 01/03/2020 Version : 4 10/14

Section 12. Ecological information

Diphosphorus Pentaoxide			
with Alcohols, C14-18 even,			
salted with Amines, C12-14,			
Tert-Alkyl			Inhoront
Distillates (petroleum),	-	-	Inherent
hydrotreated heavy paraffinic			laborout
White mineral oil (petroleum)	-	-	Inherent

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Sutene, homopolymer (products derived from either/ or But-1-ene/But-2-ene)	7.6 to 7.8	314 to 1882	high
Distillates (petroleum), hydrotreated heavy paraffinic	>6	-	high
Distillates (petroleum), solvent-dewaxed heavy paraffinic	2 to 6	-	high
Distillates (petroleum), hydrotreated light paraffinic	>6	-	high
Reaction Products of Diphosphorus Pentaoxide with Alcohols, C14-18 even, salted with Amines, C12-14, Tert-Alkyl	5.14	-	high
Distillates (petroleum), hydrotreated heavy paraffinic	>6	-	high
White mineral oil (petroleum)	>6	-	high

Mobility in soil

Soil/water partition coefficient (Koc)

: 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.

Date of issue/Date of revision : 01/03/2020 Version : 4 11/14

Section 14. Transport 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.

Transport in bulk according

: Not available.

to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) PAIR: naphthalene

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Water Act (CWA) 307: ethylbenzene

Clean Water Act (CWA) 311: xylene; ethylbenzene; methyl methacrylate

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)** : Listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

DEA List I Chemicals

(Precursor Chemicals)

: Not listed

DEA List II Chemicals

: Not listed

(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : SKIN SENSITIZATION - Category 1

Composition/information on ingredients

Name	%	Classification
Sutene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	≥25 - ≤50	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent- dewaxed light paraffinic	≤5	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	≤5	ASPIRATION HAZARD - Category 1
Polysulfides, di-tert-Bu	≤5	SKIN SENSITIZATION - Category 1B
Reaction Products of Diphosphorus Pentaoxide with Alcohols, C14-18 even, salted with Amines, C12-14, Tert-Alkyl	≤1.7	SKIN SENSITIZATION - Category 1B
Distillates (petroleum), hydrotreated heavy paraffinic	≤2.3	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil- based	≤2.1	ASPIRATION HAZARD - Category 1
Reaction products of 4-methyl- 2-pentanol and diphosphorus pentasulfide, propoxylated. esterfied with diphosphorus pentaoxide and salted by	≤3	ACUTE TOXICITY (oral) - Category 4 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1

Date of issue/Date of revision : 01/03/2020 12/14 Version: 4

MAX GEAR SAE 85W-140

Section 15. Regulatory information

amines c12-14-tert-alkyl

State regulations

Massachusetts : The following components are listed: OIL MIST, MINERAL; MINERAL OIL,

PETROLEUM DISTILLATES, SOLVENT-DEWAXED LIGHT PARAFFINIC; MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT PARAFFINIC; OIL MIST,

MINERAL; OIL MIST, MINERAL; OIL MIST, MINERAL; OIL MIST, MINERAL

New York : None of the components are listed. **New Jersey** : None of the components are listed. **Pennsylvania** : None of the components are listed.

California Prop. 65

MARNING: This product can expose you to chemicals including Cumene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

information provided is based on industrial use and may not be relevant to consumer applications.

Ingredient name	Concentration (%)	level	Maximum acceptable dosage level
Cumene	0.000203	-	-
Ethylbenzene	0.000203	Yes.	

International lists

National inventory

Australia : Not determined.

Canada : All components are listed or exempted. China : All components are listed or exempted.

: At least one component is not listed in EINECS but all such components are listed in **Europe**

ELINCS. Please contact your supplier for information on the inventory status of this

material.

: Japan inventory (ENCS): Not determined. **Japan**

Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted. **Philippines** All components are listed or exempted. Republic of Korea : All components are listed or exempted. MI components are listed or exempted. **Taiwan**

Thailand : Not determined. **Turkey** : Not determined.

United States All components are listed or exempted.

Viet Nam : Not determined.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification	
Skin Sens. 1, H317	Calculation method	
Aquatic Acute 3, H402	Calculation method	
Aquatic Chronic 3, H412	Calculation method	

History

: 01/03/2020 Date of issue/Date of

revision

Version : 4

Date of issue/Date of revision : 01/03/2020 13/14 Version

Section 16. Other information

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 = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available

SGG = Segregation Group

UN = United Nations

▼ Indicates information that has changed from previously issued version.

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.

Date of issue/Date of revision : 01/03/2020 Version : 4 14/14