SAFETY DATA SHEET

SNOW 2-C

Section 1. Identification

GHS product identifier : SNOW 2-C

Product code : 301468175195

Other means of identification : Not available.

Product type : Liquid.

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

Identified uses
Lubricating Oil

Uses advised against	Reason
None known.	

Supplier's details : Calumet Branded Products, LLC
1060 N Capitol Ave Suite 6-401
Indianapolis, IN 46204
USA
Technical Services:317-328-5660

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

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

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.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

Ingredient name	%	CAS number
Dec-1-ene, homopolymer, hydrogenated	≥75 - ≤90	68037-01-4
Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	≥10 - ≤25	9003-29-6
Distillates (petroleum), hydrotreated light	≥10 - ≤21	64742-47-8
Isooctadecanoic acid, reaction products with tetraethylenepentamine	≤10	68784-17-8
Isooctadecanoic acid, reaction products with tetraethylenepentamine	≤2.6	68784-17-8
Distillates (petroleum), hydrotreated heavy paraffinic	≤2.4	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤2.4	64742-65-0
Distillates (petroleum), hydrotreated light paraffinic	≤2.4	64742-55-8
Distillates (petroleum), solvent-dewaxed light paraffinic	≤2.4	64742-56-9
Solvent naphtha (petroleum), heavy arom.	≤1.1	64742-94-5
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	≤0.1	-
1,2,4-trimethylbenzene	≤0.1	95-63-6

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 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. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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 : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Section 4. First aid measures

Inhalation : No specific data.

Skin contact : No specific data.

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.

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.

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.

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. 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 non-emergency 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).

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.

Section 6. Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. 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. 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).

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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Dec-1-ene, homopolymer, hydrogenated	None.
Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	None.
Distillates (petroleum), hydrotreated light	**ACGIH TLV (United States, 1/2023). [Kerosene as total hydrocarbon vapor] Absorbed through skin.** TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.
Isooctadecanoic acid, reaction products with tetraethylenepentamine	None.
Isooctadecanoic acid, reaction products with tetraethylenepentamine	None.
Distillates (petroleum), hydrotreated heavy paraffinic	**ACGIH TLV (United States, 1/2023). [Mineral Oil, pure, highly and severely refined]** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **OSHA PEL (United States, 5/2018). [Oil mist, mineral]** TWA: 5 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020). [OIL MIST MINERAL]** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**ACGIH TLV (United States, 1/2023). [Mineral Oil, pure, highly and severely refined]** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **OSHA PEL (United States, 5/2018). [Oil mist, mineral]** TWA: 5 mg/m³ 8 hours.

Section 8. Exposure controls/personal protection

	NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist
Distillates (petroleum), hydrotreated light paraffinic	**ACGIH TLV (United States, 1/2023). [Mineral Oil, pure, highly and severely refined]** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **OSHA PEL (United States, 5/2018). [Oil mist, mineral]** TWA: 5 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020). [OIL MIST MINERAL]** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist
Distillates (petroleum), solvent-dewaxed light paraffinic	**ACGIH TLV (United States, 1/2023). [Mineral Oil, pure, highly and severely refined]** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **OSHA PEL (United States, 5/2018). [Oil mist, mineral]** TWA: 5 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020). [OIL MIST MINERAL]** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist
Solvent naphtha (petroleum), heavy arom.	None.
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	None.
1,2,4-trimethylbenzene	**OSHA PEL 1989 (United States, 3/1989). [Trimethyl benzene]** TWA: 25 ppm 8 hours. TWA: 125 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020).** TWA: 25 ppm 10 hours. TWA: 125 mg/m³ 10 hours. **ACGIH TLV (United States, 1/2023).** TWA: 10 ppm 8 hours. **CAL OSHA PEL (United States, 5/2018). [trimethylbenzene, all isomers]** TWA: 125 mg/m³ 8 hours. TWA: 25 ppm 8 hours.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : 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

Section 8. Exposure controls/personal protection

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. 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 side-shields.

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.

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 and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Color : Amber.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point/freezing point : Not available.

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Closed cup: 152.22°C (306°F)

Evaporation rate : Not available.

Flammability : Not available.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	5.10043	0.68		13.05111	1.7	

Relative vapor density : Not available.

Relative density : 0.8549

Solubility(ies) :

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water : Not available.

Section 9. Physical and chemical properties and safety characteristics

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	215	419	EU A.15

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): 48.01 mm^2/s (48.01 cSt)

Flow time (ISO 2431) : Not available.

Pour point : -56°C (-68.8°F)

Particle characteristics

Median particle size : Not applicable.

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
Dec-1-ene, homopolymer, hydrogenated	LC50 Inhalation Dusts and mists	Rat	>5.2 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Butene, 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 light	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Isooctadecanoic acid, reaction products with tetraethylenepentamine	LD50 Oral	Rat	>5 g/kg	-
Isooctadecanoic acid, reaction products with tetraethylenepentamine	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5 g/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),	LC50 Inhalation Dusts and mists	Rat	>5.53 mg/l	4 hours

Section 11. Toxicological information

solvent-dewaxed heavy paraffinic				
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated light 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	-
	LD50 Oral	Rat	>5000 mg/kg	-
Solvent naphtha (petroleum), heavy arom.	LC50 Inhalation Dusts and mists	Rat	>5.2 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	LD50 Oral	Rat	300 mg/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m³	4 hours
	LD50 Dermal	Rabbit	>3440 mg/kg	-
	LD50 Oral	Rat	5 g/kg	-

Irritation/Corrosion

Not available.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	skin	Mouse	Sensitizing

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 487 *In vitro* Micronucleus Test	Experiment: In vitro Subject: Mammalian-Human	Negative

Carcinogenicity

Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	-	-	-	Rat	Oral: 75 mg/kg	28 days

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
1,2,4-trimethylbenzene	Category 3 Category 3	-	Respiratory tract irritation Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Dec-1-ene, homopolymer, hydrogenated	ASPIRATION HAZARD - Category 1
Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed light paraffinic	ASPIRATION HAZARD - Category 1
1,2,4-trimethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

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 : No specific data.

Ingestion : No specific data.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	Chronic NOAEL Oral	Rat	75 mg/kg	-

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Section 11. Toxicological information

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/l)
SNOW 2-C	N/A	3930.6	N/A	N/A	N/A
Dec-1-ene, homopolymer, hydrogenated	N/A	2500	N/A	N/A	N/A
Distillates (petroleum), hydrotreated light	N/A	2500	N/A	N/A	N/A
Isooctadecanoic acid, reaction products with tetraethylenepentamine	N/A	2500	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), hydrotreated light 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
Solvent naphtha (petroleum), heavy arom.	N/A	2500	N/A	N/A	N/A
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	500	1100	N/A	N/A	N/A
1,2,4-trimethylbenzene	5000	2500	N/A	18	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	Acute EC50 >1000 mg/l	Daphnia	48 hours
	Acute LC50 >1000 mg/l	Fish	96 hours
Distillates (petroleum), hydrotreated light	Acute EC50 >1000 mg/l	Algae	72 hours
	Acute LC50 >1000 mg/l Fresh water	Daphnia	48 hours
Isooctadecanoic acid, reaction products with tetraethylenepentamine	EC50 94 mg/l	Algae	4 days
	EC50 >10000 mg/l	Daphnia	2 days
	LC50 >1000 mg/l	Fish	4 days
	NOEC 23 mg/l	Algae	4 days
	NOEC >10 mg/l	Daphnia	21 days
Isooctadecanoic acid, reaction products with tetraethylenepentamine	Acute EC50 94 mg/l	Algae	4 days
	Acute EC50 >1000 mg/l	Daphnia	2 days
	Acute NOEC 23 mg/l	Algae	4 days
	Acute NOEC >10 mg/l	Daphnia	21 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
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

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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
Distillates (petroleum), solvent-dewaxed light paraffinic	Acute LC50 4.5 mg/l	Fish	96 hours
Solvent naphtha (petroleum), heavy arom.	Acute EC50 1 to 20 mg/l	Algae	72 hours
	Acute EC50 1 to 20 mg/l	Crustaceans	48 hours
	Acute LC50 1 to 20 mg/l	Fish	96 hours
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	Acute EC50 1.9 mg/l	Algae	72 hours
	Acute EC50 6.8 mg/l	Daphnia	48 hours
	Acute LC50 18 mg/l	Fish	96 hours
	Acute NOEC 0.1 mg/l	Algae	72 hours
	Acute NOEC 3.9 mg/l	Daphnia	48 hours
	Acute NOEC 12 mg/l	Fish	96 hours
1,2,4-trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - *Elasmopus pectenicrus* - Adult	48 hours
	Acute LC50 7720 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Distillates (petroleum), hydrotreated light	OECD 301F Ready Biodegradability - Manometric Respirometry Test	69 % - Readily - 28 days	-	-
Isooctadecanoic acid, reaction products with tetraethylenepentamine	OECD 301B Ready Biodegradability - CO_2 Evolution Test	4.5 % - 28 days	-	-
Isooctadecanoic acid, reaction products with tetraethylenepentamine	OECD 301B Ready Biodegradability - CO_2 Evolution Test	4.5 % - 28 days	-	-
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	OECD 301B Ready Biodegradability - CO_2 Evolution Test	9 % - Not readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	-	-	Not readily
Distillates (petroleum), hydrotreated light	-	-	Readily
Isooctadecanoic acid, reaction products with tetraethylenepentamine	-	-	Not readily
Isooctadecanoic acid, reaction products with tetraethylenepentamine	-	-	Not readily
Distillates (petroleum), hydrotreated heavy paraffinic	-	-	Inherent

Section 12. Ecological information

Distillates (petroleum), hydrotreated light paraffinic	-	-	Inherent
Solvent naphtha (petroleum), heavy arom.	-	-	Inherent
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Dec-1-ene, homopolymer, hydrogenated	>6.5	-	High
Butene, 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
Solvent naphtha (petroleum), heavy arom.	2.8 to 6.5	99 to 5780	High
1,2,4-trimethylbenzene	3.63	243	Low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : 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. 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.

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.

Section 14. Transport information

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR**: naphthalene

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

TSCA 8(c) calls for record of SAR: trimethyl phosphate

Clean Water Act (CWA) 307: naphthalene

Clean Water Act (CWA) 311: naphthalene

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 (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	%	Classification
Dec-1-ene, homopolymer, hydrogenated	≥75 - ≤90	ASPIRATION HAZARD - Category 1
Butene, homopolymer (products derived from either/or But-1-ene/ But-2-ene)	≥10 - ≤25	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light	≥10 - ≤21	ASPIRATION HAZARD - Category 1
Isooctadecanoic acid, reaction products with tetraethylenepentamine	≤10	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
Isooctadecanoic acid, reaction products with tetraethylenepentamine	≤2.6	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
Distillates (petroleum), hydrotreated heavy paraffinic	≤2.4	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	≤2.4	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed light paraffinic	≤2.4	ASPIRATION HAZARD - Category 1
1,2,4-trimethylbenzene	≤0.1	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Section 15. Regulatory information

		ASPIRATION HAZARD - Category 1

State regulations

Massachusetts : None of the components are listed.

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

⚠ **WARNING**: This product can expose you to chemicals including Naphthalene, 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 (%)	No significant risk level	Maximum acceptable dosage level
Naphthalene	0.01272 - 0.0636	Yes.	-
Trimethyl phosphate	0.001 - 0.002	Yes.	-

International lists

National inventory

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : At least one component is not listed.

Eurasian Economic Union : **Russian Federation inventory**: Not determined.

New Zealand : All components are listed or exempted.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : All components are listed or exempted.

Thailand : Not determined.

Turkey : Not determined.

United States : All components are active or exempted.

Viet Nam : Not determined.

Section 16. Other information

National Fire Protection Association (U.S.A.)

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Section 16. Other information

Date of issue/Date of revision : 09/12/2024

Date of previous issue : 07/31/2023

Version : 7

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

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