SAFETY DATA SHEET

ADDITIN M 93.001

Version	Revision Date:	SDS Number:	Date of last issue: 04/03/2024
2.0	11/01/2024	203000007542	Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : ADDITIN M 93.001

Product code : 000000000057516645

Manufacturer or supplier's details

Company : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, Pennsylvania 15275-1112

Responsible Department : (800) LANXESS
(412) 809-1000
lanxesshes@lanxess.com

Emergency telephone : CHEMTREC (800) 424-9300 or
(703) 527-3887 (Outside U.S.A) and mention CCN12916.
Lanxess Emergency Phone (800) 410-3063.

Recommended use of the chemical and restrictions on use

Recommended use : Lubricants and lubricant additives

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Eye irritation : Category 2A

Skin sensitization : Category 1

Reproductive toxicity : Category 2

Specific target organ toxicity - repeated exposure : Category 1 (Liver)

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : May cause an allergic skin reaction.
Causes serious eye irritation.
Suspected of damaging the unborn child.
Causes damage to organs (Liver) through prolonged or repeated exposure.

Precautionary Statements :

Prevention:

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist or vapors.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/ attention.
If skin irritation or rash occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Wash contaminated clothing before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Additional Labeling

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 58.4 %

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)

2,6-di-tert-butyl-p-cresol	128-37-0	>= 1 - < 5
1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-	94270-86-7	>= 1 - < 5
Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates	80939-62-4	>= 1 - < 5
Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol	56748-97-1	>= 1 - < 5
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 1 - < 5
(tetrapropenyl)succinic acid	27859-58-1	>= 1 - < 5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and plenty of water.
Remove contaminated clothing and shoes.
Continue to rinse for at least 20 minutes.
In the case of skin irritation or allergic reactions see a physician.
Wash contaminated clothing before re-use.

In case of eye contact : Get medical attention.
In case of contact, flush eyes with plenty of water for at least 20 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated.
Remove contact lenses, if present and easy to do. Continue rinsing.

If swallowed : Rinse mouth with water.
Do not induce vomiting unless directed to do by medical personnel.
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms : Eye: Causes irritation with symptoms of reddening, tearing, stinging, and swelling.
May cause sensitization by skin contact.
Once sensitized, an allergic skin reaction may occur with reddening, swelling, and rash when subsequently exposed to very low levels.
Adverse symptoms sometimes include the following:
Effects on fertility.

Effects on fetal development.

Effects	:	May cause an allergic skin reaction. Causes serious eye irritation. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure.
Protection of first-aiders	:	First Aid responders should pay attention to self-protection and use the recommended protective clothing No action shall be taken involving any personal risk or without suitable training.
Notes to physician	:	Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	In case of fire, use water spray (fog), foam or dry chemical.
Unsuitable extinguishing media	:	None known.
Specific hazards during fire fighting	:	In a fire or if heated, a pressure increase will occur and the container may burst. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Carbon dioxide (CO2) Carbon monoxide Nitrogen oxides (NOx) Sulfur oxides phosphorus oxide (P_2O_5)
Further information	:	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	:	No action shall be taken involving any personal risk or without suitable training. Evacuate personnel to safe areas.

Keep unnecessary and unprotected personnel from entering.
Do not touch or walk through spilled material.
Do not breathe vapors or spray mist.
Provide adequate ventilation.
Put on appropriate personal protection equipment.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Stop leak if safe to do so.
Move containers from spill area.
Keep people away from and upwind of spill/leak.
Wash spillages into an effluent treatment plant or proceed as follows.
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Dispose of wastes in an approved waste disposal facility.
Do not allow spilled material or wash water to enter sewers, surface waters, or groundwater systems.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Avoid inhalation, ingestion and contact with skin and eyes.
Use only with adequate ventilation.
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; observe all precautions for product.
Do not re-use empty containers.
Remove contaminated clothing and protective equipment before entering eating areas.
Workers should wash hands and face before eating, drinking and smoking.
Put on appropriate personal protection equipment.
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
Persons with a history of skin sensitization to this product should not be employed in any process in which this product

is used.
Avoid exposure during pregnancy.

Conditions for safe storage : 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 containers 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 container to avoid environmental contamination.
Empty containers retain residue and can be dangerous.
Do not reuse container.

Further information on storage stability : Stable under recommended storage conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2,6-di-tert-butyl-p-cresol	128-37-0	TWA (Inhalable fraction and vapor)	2 mg/m3	ACGIH
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH

Engineering measures : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
NIOSH approved, air-purifying organic vapor respirator.

Hand protection

Material : Polyvinyl chloride - PVC
Wearing time : < 60 min

Remarks	:	Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	:	Safety glasses with side-shields
Skin and body protection	:	Complete suit protecting against chemicals Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	:	Ensure that eye flushing systems and safety showers are located close to the working place.
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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	viscous liquid
Physical state	:	liquid
Color	:	brown
Odor	:	oily
Odor Threshold	:	Not relevant
pH	:	substance/mixture is non-soluble (in water)
Melting point/ range	:	5 °F / -15 °C
Boiling point/boiling range	:	No data available
Flash point	:	352 °F / 178 °C Method: closed cup
Evaporation rate	:	No data available
Flammability (liquids)	:	No data available

Self-ignition	:	No data available
Burning number	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	0.998 g/cm3 (68 °F / 20 °C)
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	280 mm2/s (104 °F / 40 °C)
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Surface tension	:	No data available
Molecular weight	:	No data available
Metal corrosion rate	:	Not corrosive to metals.
Particle size	:	Not applicable

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Extremes of temperature and direct sunlight.
Incompatible materials	:	Strong oxidizing agents Acids and bases
Hazardous decomposition products	:	No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Skin contact
Ingestion
Inhalation

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity	:	Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Components:

2,6-di-tert-butyl-p-cresol:

Acute oral toxicity	:	LD50 (Rat, male and female): > 2,930 mg/kg Method: OECD Test Guideline 401 GLP: Yes Assessment: The substance or mixture has no acute oral toxicity Remarks: Dosage caused no mortality
Acute dermal toxicity	:	LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: Yes Assessment: The substance or mixture has no acute dermal toxicity Remarks: Dosage caused no mortality

1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-:

Acute oral toxicity : LD50 (Rat, male and female): 3,313 mg/kg
Method: OECD Test Guideline 401
GLP: No
Remarks: Test results on an analogous substance/product.

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: Yes
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Test results on an analogous substance/product.

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg
GLP: Yes
Remarks: Extrapolation according to Regulation (EC) No. 440/2008

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Acute oral toxicity : LD50 (Rat): > 300 mg/kg

Acute dermal toxicity : LD50: 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Distillates (petroleum), hydrotreated light naphthenic:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: Yes
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Dosage caused no mortality
Test results on an analogous substance/product.

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.53 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: No information available.
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Dosage caused no mortality
Test results on an analogous substance/product.

Acute dermal toxicity : LD50 (Rabbit, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: Yes
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Dosage caused no mortality
Test results on an analogous substance/product.

(tetrapropenyl)succinic acid:

Acute oral toxicity : LD50 (Rat, female): 2,100 mg/kg
Method: OECD Test Guideline 401
GLP: Yes

Skin corrosion/irritation

Not classified due to lack of data.

Components:

2,6-di-tert-butyl-p-cresol:

Species : Rabbit
Method : Draize Test
Result : No skin irritation

1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-:

Species : Rabbit
Method : Draize Test
Result : Irritating to skin.
GLP : No
Remarks : Test results on an analogous substance/product.

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Irritating to skin.

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Species : reconstructed human epidermis (RhE)
Assessment : Irritating to skin.
Method : Regulation (EC) No. 440/2008, Annex, B.46
Result : Skin irritation

Distillates (petroleum), hydrotreated light naphthenic:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

GLP : Yes
Remarks : Test results on an analogous substance/product.

(tetrapropenyl)succinic acid:

Species : Rabbit
Exposure time : 4 h
Method : OECD Test Guideline 404
Result : Irritating to skin.
GLP : Yes

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

2,6-di-tert-butyl-p-cresol:

Species : Rabbit
Result : No eye irritation
Method : Draize Test

1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-:

Species : Rabbit
Result : No eye irritation
Method : OECD Test Guideline 405
GLP : No
Remarks : Test results on an analogous substance/product.

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Species : Rabbit
Result : Irritating to eyes.
Method : OECD Test Guideline 405

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Species : Bovine cornea
Result : Irreversible effects on the eye
Assessment : Causes severe burns.
Method : Regulation (EC) No. 440/2008, Annex, B.47

Distillates (petroleum), hydrotreated light naphthenic:

Species : Rabbit
Result : No eye irritation
Method : OECD Test Guideline 405
GLP : Yes
Remarks : Test results on an analogous substance/product.

(tetrapropenyl)succinic acid:

Species	:	Rabbit
Result	:	Risk of serious damage to eyes.
Exposure time	:	21 d
GLP	:	No information available.

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified due to lack of data.

Components:

2,6-di-tert-butyl-p-cresol:

Test Type	:	Patch Test
Routes of exposure	:	Skin contact
Species	:	Human
Result	:	Does not cause skin sensitization.

Test Type	:	No data available
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	No information available.
Result	:	Did not cause sensitization on laboratory animals.
GLP	:	No

1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-:

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	The product is a skin sensitiser, sub-category 1B.
GLP	:	Yes
Remarks	:	Test results on an analogous substance/product.

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitization on laboratory animals.

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Species	:	Guinea pig
Method	:	OECD Test Guideline 406

Result : Did not cause sensitization on laboratory animals.

Distillates (petroleum), hydrotreated light naphthenic:

Test Type	:	Buehler Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitization on laboratory animals.
GLP	:	Yes

(tetrapropenyl)succinic acid:

Test Type	:	Buehler Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitization on laboratory animals.
GLP	:	Yes

Germ cell mutagenicity

Not classified due to lack of data.

Components:

2,6-di-tert-butyl-p-cresol:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: No information available.

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: No information available.
Result: negative
GLP: No information available.

Test Type: HPRT test
Test system: rat hepatocytes
Metabolic activation: with metabolic activation
Method: No information available.
Result: negative
GLP: No information available.

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Cell type: Bone marrow

Application Route: Intraperitoneal injection
Method: No information available.
Result: negative
GLP: No information available.

Test Type: Cytogenetic assay
Species: Rat (male)
Cell type: Bone marrow
Application Route: Oral
Method: No information available.
Result: negative
GLP: No information available.

1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: No
Remarks: Test results on an analogous substance/product.

Test Type: Ames test
Test system: Escherichia coli
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: No
Remarks: Test results on an analogous substance/product.

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: Yes
Remarks: Test results on an analogous substance/product.

Test Type: Micronucleus test
Test system: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: negative
GLP: Yes
Remarks: Test results on an analogous substance/product.

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Genotoxicity in vitro : Test system: Bacteria

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test system: Mammalian-Animal
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test system: Mammalian-Animal
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)
Test system: TA1535
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Result: negative

Distillates (petroleum), hydrotreated light naphthenic:

Genotoxicity in vitro : Test Type: Ames test
Test system: TA98
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: equivocal
GLP: No information available.
Remarks: Information given is based on data obtained from similar substances.

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: No
Remarks: Information given is based on data obtained from similar substances.

Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: equivocal
GLP: Yes
Remarks: Information given is based on data obtained from similar substances.

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Application Route: Intraperitoneal
Method: OECD Test Guideline 474
Result: negative
GLP: No information available.
Remarks: Test results on an analogous substance/product.

(tetrapropenyl)succinic acid:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 490
Result: negative
GLP: Yes

Test Type: Chromosome aberration test in vitro
Test system: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: Yes

Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: No

Carcinogenicity

Not classified due to lack of data.

Components:

2,6-di-tert-butyl-p-cresol:

Species	:	Rat, male and female
Application Route	:	Oral
Exposure time	:	22 month(s)
Dose	:	0 - 25 - 100 - 250/500 mg/kg body weight
NOAEL	:	25 mg/kg bw/day
Method	:	No information available.
Result	:	equivocal
GLP	:	Yes

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

Distillates (petroleum), hydrotreated light naphthenic:

Carcinogenicity - Assessment : Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Suspected of damaging the unborn child.

Components:

2,6-di-tert-butyl-p-cresol:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
Dose: 0 - 25 - 100 - 250/500
Fertility: NOAEL: 500 mg/kg body weight
Result: Animal testing did not show any effects on fertility.
GLP: Yes

Effects on fetal development : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
Dose: 0 - 25 - 100 - 250/500 milligram per kilogram
General Toxicity Maternal: NOAEL: 100 mg/kg body weight
Developmental Toxicity: NOAEL: 100 mg/kg body weight
Method: No information available.
Result: Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses
GLP: Yes

Test Type: Pre-natal
Species: Mouse, female
Application Route: Oral
Dose: 70 - 240 - 800 milligram per kilogram
General Toxicity Maternal: NOAEL: 240 mg/kg body weight
Developmental Toxicity: NOAEL: 800 mg/kg body weight
Method: No information available.
Result: Did not show teratogenic effects in animal experiments.

GLP: No information available.

1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Rat, male and female
Application Route: Oral
Dose: 0 - 15 - 45 - 150 mg/kg bw/day
General Toxicity Parent: NOAEL: 45 mg/kg bw/day
Fertility: NOAEL: 150 mg/kg bw/day
Early Embryonic Development: NOAEL: 45 mg/kg bw/day
Method: OECD Test Guideline 422
Result: Animal testing did not show any effects on fertility.
GLP: Yes
Remarks: Test results on an analogous substance/product.

Effects on fetal development : Test Type: Pre-natal
Species: Rat, female
Application Route: Oral
Dose: 0 - 15 - 45 - 150 mg/kg bw/day
General Toxicity Maternal: NOAEL: 45 mg/kg bw/day
Teratogenicity: NOAEL: 150 mg/kg bw/day
Developmental Toxicity: NOAEL: 150 mg/kg bw/day
Embryo-fetal toxicity.: NOAEL: 150 mg/kg bw/day
Method: OECD Test Guideline 414
Result: Did not show teratogenic effects in animal experiments.
GLP: Yes
Remarks: Test results on an analogous substance/product.

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Effects on fertility : Species: Rat, male and female
Application Route: Oral
Early Embryonic Development: NOAEL: 10 mg/kg body weight
Symptoms: No effects on early embryonic development.
Method: OECD Test Guideline 422

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Oral
General Toxicity Parent: NOAEL: 300 mg/kg body weight

Effects on fetal development : Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 300 mg/kg body weight

Distillates (petroleum), hydrotreated light naphthenic:

Effects on fertility : Test Type: Fertility/early embryonic development
Species: Rat, male and female
Application Route: Oral
Dose: 1000 milligram per kilogram
General Toxicity Parent: NOAEL: >= 1,000 mg/kg bw/day
Fertility: NOAEL: >= 1,000 mg/kg bw/day
Early Embryonic Development: NOAEL: >= 1,000 mg/kg bw/day
Method: OECD Test Guideline 421
Result: No effects on fertility and early embryonic development were detected.
GLP: Yes
Remarks: Test results on an analogous substance/product.

(tetrapropenyl)succinic acid:

Effects on fertility : Test Type: Fertility/early embryonic development
Species: Rat, male and female
Application Route: Oral
Dose: 16 - 40 - 100 milligram per kilogram
General Toxicity Parent: NOAEL: > 100 mg/kg body weight
Early Embryonic Development: NOAEL: > 100 mg/kg body weight
Method: OECD Test Guideline 421
Result: negative
GLP: Yes

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

STOT-single exposure

Not classified due to lack of data.

Components:

2,6-di-tert-butyl-p-cresol:

Assessment : May cause respiratory irritation.

Distillates (petroleum), hydrotreated light naphthenic:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

Causes damage to organs (Liver) through prolonged or repeated exposure.

Components:

(tetrapropenyl)succinic acid:

Target Organs	:	Liver
Assessment	:	The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

Repeated dose toxicity

Components:

2,6-di-tert-butyl-p-cresol:

Species	:	Rat, male and female
NOAEL	:	25 mg/kg
LOAEL	:	100 mg/kg
Application Route	:	Oral
Exposure time	:	22 Months
Number of exposures	:	daily
Dose	:	0 - 25 - 100 - 250/500 mg/kg bw/day
Method	:	No information available.
GLP	:	Yes
Symptoms	:	alteration in liver enzymes
Remarks	:	Chronic toxicity

Species	:	Pig, male and female
	:	1500 ppm
Application Route	:	Oral
Exposure time	:	42 Days
Number of exposures	:	daily
Dose	:	0 - 150 - 1000 - 1500 parts per million
Method	:	No information available.
GLP	:	Yes
Remarks	:	Subacute toxicity

1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-:

Species	:	Rat, male and female
NOAEL	:	150 mg/kg
Application Route	:	Oral
Exposure time	:	90 Days
Number of exposures	:	daily
Dose	:	0 - 15 - 45 - 150 mg/kg bw/day
Method	:	OECD Test Guideline 408
GLP	:	Yes
Remarks	:	Subchronic toxicity Test results on an analogous substance/product.

Species	:	Rat, male and female
NOAEL	:	45 mg/kg

LOAEL	:	150 mg/kg
Application Route	:	Oral
Number of exposures	:	daily
Dose	:	0 - 15 - 45 - 150 mg/kg bw/day
Method	:	OECD Test Guideline 422
GLP	:	Yes
Remarks	:	Test results on an analogous substance/product.

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Species	:	Rat
NOAEL	:	300 mg/kg
Application Route	:	Oral

Distillates (petroleum), hydrotreated light naphthenic:

Species	:	Rat, male
LOAEL	:	125 mg/kg
Application Route	:	Oral
Exposure time	:	90 d
Number of exposures	:	daily
Dose	:	125 - 500 mg/kg bw/d
Method	:	OECD Test Guideline 408
GLP	:	No information available.
Remarks	:	Test results on an analogous substance/product.

(tetrapropenyl)succinic acid:

Species	:	Rat, male and female
NOAEL	:	100 mg/kg
Application Route	:	Oral
Exposure time	:	28 d
Number of exposures	:	daily
Dose	:	16 - 40 - 100 mg/kg bw/day
Method	:	OECD Test Guideline 407
GLP	:	Yes
Remarks	:	Subacute toxicity

Aspiration toxicity

Not classified due to lack of data.

Components:

Distillates (petroleum), hydrotreated light naphthenic:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

2,6-di-tert-butyl-p-cresol:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 0.57 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: Regulation (EC) No. 440/2008, Annex, C.1
GLP: Yes
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.48 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 202
GLP: Yes
Remarks: Fresh water

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): > 0.4 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: Regulation (EC) No. 440/2008, Annex, C.3
GLP: Yes
Remarks: Fresh water

EC10 (Desmodesmus subspicatus (green algae)): 0.4 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: Regulation (EC) No. 440/2008, Annex, C.3
GLP: Yes
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : NOEC (Oryzias latipes (Orange-red killifish)): 0.053 mg/l
Exposure time: 42 d
Test Type: flow-through test
Analytical monitoring: Yes
Method: OECD Test Guideline 210

GLP: Yes
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.023 mg/l
End point: Reproduction
Exposure time: 21 d
Test Type: semi-static test
Analytical monitoring: Yes
Method: OECD Test Guideline 202
GLP: Yes
Remarks: Fresh water

Toxicity to microorganisms : EC50 (activated sludge): > 10,000 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Test Type: static test
Analytical monitoring: No
Method: OECD Test Guideline 209
GLP: Yes
Remarks: Fresh water
nominal concentration

Toxicity to soil dwelling organisms : Test Type: Reproduction Test
NOEC (Eisenia fetida (earthworms)): 25 mg/kg
Exposure time: 28 d
End point: Reproduction
Method: OECD Test Guideline 222
GLP: Yes

Plant toxicity : NOEC: 4.74 mg/kg
Exposure time: 17 d
End point: Growth inhibition
Species: Allium cepa
Method: OECD Test Guideline 208
GLP: Yes

EC50: 20.9 mg/kg
Exposure time: 17 d
End point: Growth inhibition
Species: Allium cepa
Method: OECD Test Guideline 208
GLP: Yes

1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 1.3 mg/l
Exposure time: 96 h
Test Type: static test
Analytical monitoring: No
Method: OECD Test Guideline 203

GLP: No
Remarks: Fresh water
nominal concentration
Test results on an analogous substance/product.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.05 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 202
GLP: Yes
Remarks: Fresh water
nominal concentration
Test results on an analogous substance/product.

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 0.976 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water
nominal concentration
Test results on an analogous substance/product.

EC10 (Desmodesmus subspicatus (green algae)): 0.658 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water
nominal concentration
Test results on an analogous substance/product.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.35 mg/l
End point: Reproduction
Exposure time: 21 d
Test Type: semi-static test
Analytical monitoring: No
Method: OECD Test Guideline 211
GLP: Yes
Remarks: Fresh water
nominal concentration
Test results on an analogous substance/product.

EC10 (Daphnia magna (Water flea)): 0.435 mg/l
End point: Reproduction

Exposure time: 21 d
Test Type: semi-static test
Analytical monitoring: No
Method: OECD Test Guideline 211
GLP: Yes
Remarks: Fresh water
nominal concentration
Test results on an analogous substance/product.

Toxicity to microorganisms : EC20 (activated sludge): 15 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Analytical monitoring: No
Method: OECD Test Guideline 209
GLP: No
Remarks: Fresh water
nominal concentration
Test results on an analogous substance/product.

EC50 (activated sludge): 69 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Analytical monitoring: No
Method: OECD Test Guideline 209
GLP: No
Remarks: Fresh water
nominal concentration
Test results on an analogous substance/product.

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5.5 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.2 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (microalgae)): > 10 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

EC50 (Pseudokirchneriella subcapitata (algae)): > 10
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h

Method: OECD Test Guideline 209

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 26.3 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

NOEC (Oncorhynchus mykiss (rainbow trout)): 17.3 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Lowest Observed Effect Concentration (Oncorhynchus mykiss (rainbow trout)): 39.6 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 84.91 mg/l
Exposure time: 48 h
Test Type: Immobilization
Method: OECD Test Guideline 203

NOEC (Daphnia magna (Water flea)): 50 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 203

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 59.6 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 59.6 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (adapted and activated sludge micro-organism): 1,000 mg/l
Exposure time: 3 h
Test Type: Cell multiplication inhibition test
Method: OECD Test Guideline 209

Distillates (petroleum), hydrotreated light naphthenic:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Analytical monitoring: Yes
Method: OECD Test Guideline 203

GLP: Yes
Remarks: water extractable fraction

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 48 h
Analytical monitoring: Yes
Method: OECD Test Guideline 202
GLP: Yes
Remarks: water extractable fraction

Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Analytical monitoring: No information available.
Method: OECD Test Guideline 201
GLP: No information available.
Remarks: water extractable fraction
Test results on an analogous substance/product.

NOELR (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Analytical monitoring: No information available.
Method: OECD Test Guideline 201
GLP: No information available.
Remarks: water extractable fraction
Test results on an analogous substance/product.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR (Daphnia magna (Water flea)): 10 mg/l
End point: Reproduction
Exposure time: 21 d
Analytical monitoring: No information available.
Method: OECD Test Guideline 211
GLP: Yes
Remarks: water extractable fraction

(tetrapropenyl)succinic acid:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 203
GLP: Yes
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h

Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 202
GLP: Yes
Remarks: Fresh water

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: No
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water
water extractable fraction

Toxicity to microorganisms : EC50 (activated sludge): > 10,000 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Analytical monitoring: No
Method: OECD Test Guideline 209
GLP: Yes
Remarks: Fresh water
nominal concentration

Persistence and degradability

Components:

2,6-di-tert-butyl-p-cresol:

Biodegradability : aerobic
Inoculum: activated sludge
Result: Not readily biodegradable.
Biodegradation: 4.5 %
Exposure time: 28 d
Method: OECD Test Guideline 301C
GLP: No information available.

Stability in water : Degradation half life (DT50): 4 - 8 d
Hydrolysis: at 20 °C

Photodegradation : Sensitizer: OH
Degradation (indirect photolysis):
Degradation half life: 21.054 h

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 12 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Biodegradability : Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: Yes

Distillates (petroleum), hydrotreated light naphthenic:

Biodegradability : Result: Not readily biodegradable.

(tetrapropenyl)succinic acid:

Biodegradability : aerobic
Inoculum: activated sludge, adapted
Concentration: 100 mg/l
Result: Not readily biodegradable.
Biodegradation: 18.3 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: Yes

Bioaccumulative potential

Components:

2,6-di-tert-butyl-p-cresol:

Bioaccumulation : Bioconcentration factor (BCF): > 2,000

Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 781
Exposure time: 56 d
Temperature: 77 °F / 25 °C
Concentration: 0.05 mg/l
Method: OECD Test Guideline 305
GLP: No information available.

Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 839
Exposure time: 56 d
Temperature: 77 °F / 25 °C
Concentration: 0.005 mg/l
Method: OECD Test Guideline 305
GLP: No information available.

Partition coefficient: n- : log Pow: 5.1

octanol/water Method: measured

Butanedioic acid, 2-(tetrapropenyl)-, ester with 1,2-propanediol:

Partition coefficient: n-octanol/water : log Pow: 1.84 (77 °F / 25 °C)
Method: OECD Test Guideline 117
GLP: Yes

(tetrapropenyl)succinic acid:

Partition coefficient: n-octanol/water : log Pow: 4.69
Method: OECD Test Guideline 107
GLP: Yes

Mobility in soil

Components:

2,6-di-tert-butyl-p-cresol:

Mobility : Medium: Soil
Content: 82.9 %
Method: Calculation, Mackay Level III Fugacity Model

Medium: Water
Content: 8.53 %
Method: Calculation, Mackay Level III Fugacity Model

Medium: Sediment
Content: 7.23 %
Method: Calculation, Mackay Level III Fugacity Model

Medium: Air
Content: 1.33 %
Method: Calculation, Mackay Level III Fugacity Model

Distribution among environmental compartments : log Koc: 4.17
Method: estimated

Stability in soil : Test Type: aerobic degradation
Soil temperature: 54 °F / 12 °C
Radio label: Yes
pH: 5.7
Cation exchange capacity: 16 m_/kg
Biomass: 214 mg/kg
Method: OECD Test Guideline 307
GLP: Yes

Test Type: aerobic degradation
Soil temperature: 54 °F / 12 °C
Radio label: Yes

pH: 6.6
Cation exchange capacity: 47 m_/kg
Biomass: 265.7 mg/kg
Method: OECD Test Guideline 307
GLP: Yes

Test Type: aerobic degradation
Soil temperature: 54 °F / 12 °C
Radio label: Yes
pH: 7.4
Cation exchange capacity: 265 m_/kg
Biomass: 531.8 mg/kg
Method: OECD Test Guideline 307
GLP: Yes

Test Type: aerobic degradation
Soil temperature: 54 °F / 12 °C
Radio label: Yes
pH: 7.2
Cation exchange capacity: 257 m_/kg
Biomass: 938.7 mg/kg
Method: OECD Test Guideline 307
GLP: Yes

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

Components:

2,6-di-tert-butyl-p-cresol:

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT).
Substance is not very persistent and very bioaccumulative (vPvB).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

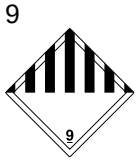
RCRA - Resource Conservation and Recovery Authorization Act : If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Waste from residues	:	The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Empty containers retain product residue; observe all precautions for product. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (2,6-DI-TERT-BUTYL-P-CRESOL, DI-ALKYLAMINOMETHYL-TOLYLTRIAZOLE)
Class	:	9
Packing group	:	III
Labels	:	9
	:	
Packing instruction (cargo aircraft)	:	964 : 450.00 L
Packing instruction (passenger aircraft)	:	964 : 450.00 L
Environmentally hazardous	:	yes
		

IMDG-Code

UN number	:	UN 3082
UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,6-DI-TERT-BUTYL-P-CRESOL, DI-ALKYLAMINOMETHYL-TOLYLTRIAZOLE)
Class	:	9
Packing group	:	III

Labels : 9
:

EmS Code : F-A, S-F
Marine pollutant : yes

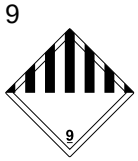
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (2,6-DI-TERT-BUTYL-P-CRESOL, DI-ALKYLAMINOMETHYL-TOLYLTRIAZOLE)
Class : 9
Packing group : III
Labels : 9
:



ERG Code : 171
Marine pollutant : yes

Hazard and Handling Notes.

Environmentally hazardous substance.
Irritating to the eyes.
Keep separated from foodstuffs
The U.S. DOT regulations in 49 CFR 172.102 permit this material to ship as an Environmentally Hazardous Substance, Class 9, using Special Provision 146.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Respiratory or skin sensitization
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know

2,6-di-tert-butyl-p-cresol	128-37-0	1 - 5
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	1 - 5

Pennsylvania Right To Know

Proprietary non-hazardous ingredient	Trade Secret	> 1
N-[(1,1,3,3-tetramethylbutyl)phenyl]naphthalen-1-amine	51772-35-1	> 1
2,6-di-tert-butyl-p-cresol	128-37-0	1 - 5
1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-	94270-86-7	1 - 5
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	1 - 5

California Prop. 65

WARNING: This product can expose you to chemicals including methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Any chemical(s) listed above which do not appear elsewhere on this SDS are contained in this product at concentrations below 0.01%.

TSCA inventory

TSCA : All substances listed as active on the TSCA inventory

TSCA list

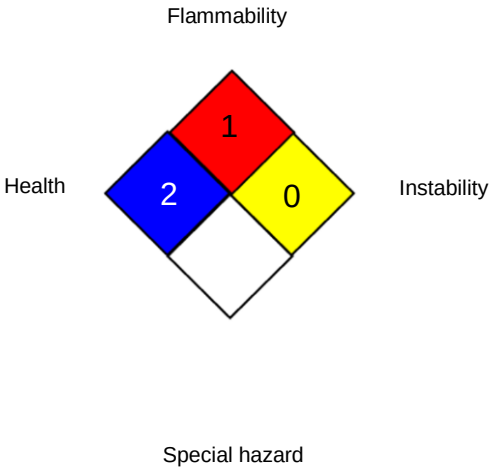
No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

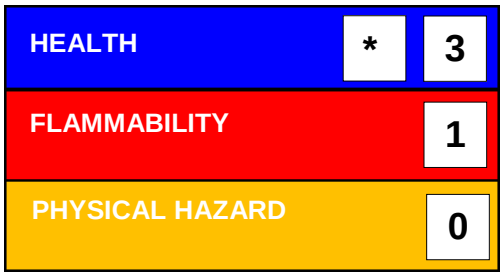
SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA : 8-hour, time-weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the

Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 11/01/2024

The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered to be a guidance for processing and does not contain any warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.

Relevant changes from the previous version are marked on the left side of the Safety Data Sheet with a black double bar in appropriate places.