

Safety Data Sheet dated 1/4/2024, version 1

1. IDENTIFICATION Product identifier Mixture identification: Trade name: DUNAPOL® AD 3153 MCP Other means of identification: Trade code: 202135-USA Recommended use of the chemical and restrictions on use Product type: One component isocyanate Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party Company: DUNA-USA Inc. 4210 FM 1405 Baytown, Texas 77523 - U.S.A. Michigan Plant: 5900 West 6th street Ludington, Michigan 49431 www.dunagroup.com/usa Competent person responsible for the safety data sheet: safety-dunausa@dunagroup.com Emergency phone number CHEMTREC 24 hour Emergency USA (800) 424-9300 +1 (703) 741-5500 (from anywhere in the world)

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Warning, Acute Tox. 4, Harmful if inhaled.

- Warning, Skin Irrit. 2, Causes skin irritation. Warning, Eye Irrit. 2B, Causes eye irritation.
- Danger, Resp. Sens. 1, May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Warning, Skin Sens. 1, May cause an allergic skin reaction.
- Warning, STOT SE 3, May cause respiratory irritation.
- Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure.

Label elements Hazard pictograms:



Danger Hazard statements:

H332 Harmful if inhaled.

H315 Causes skin irritation.

H320 Causes eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

P261 Ávoid breathing dust/fume/gas/mist/vapours/spray.

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P264 Wash hands thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/... Special Provisions: None Hazards not otherwise classified identified during the classification process: None

Ingredient(s) with unknown acute toxicity:

None.

NFPA rating:



HMIS rating:



3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A. Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

Qty	Name	Ident. Numb	er	Classification
>= 90%	Diphenylmethane - 4, 4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI)	CAS: EC:	9016-87-9 618-498-9	 A.1/4/Inhal Acute Tox. 4 H332 A.2/2 Skin Irrit. 2 H315 A.3/2B Eye Irrit. 2B H320 A.4.1/1 Resp. Sens. 1 H334 A.4.2/1 Skin Sens. 1 H317 A.8/3 STOT SE 3 H335 A.9/2 STOT RE 2 H373
>= 3% - < 5%	Bis(isopropyl) naphthalene	CAS: EC: REACH No.:	38640-62-9 254-052-6 01- 2119565150 -48	 A.10/1 Asp. Tox. 1 H304 US-HAE/C1 Aquatic Chronic 1 H410

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4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing and dispose off safely.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

As quickly as possible, remove contaminated clothing, shoes and leather goods (e.g. watchbrands, belts). Quickly and gently blot or brush away excess chemical. Immediately wash with lukewarm, gently flowing water and non-abrasive soap for 15-20 minuntes. Completely decontaminate clothing, shoes and leather goods before reuse or discard. If skin irritation or rush occurs get medical advice/attention.

In case of eyes contact:

In case of contact with eyes, wash using water for at least 30 minutes, keep the eyes opened and consult an ophthalmologist. Remove contact lenses if possible.

Protect uninjured eye.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 5 minutes, or until the chemical is removed, while holding the eyelid(s) open. If irritation persist, repeat flushing. Obtain medical attention immediately.

In case of ingestion:

Do NOT induce vomiting.

If swallowed, call a POISON CENTER or doctor/physician.

Never give anything by mouth if victim is rapidly losing consciousness or is unconscious or convulsing. Do not induce vimiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Quickly transport victim to an emergency care facility.

In case of inhalation:

If breathing is irregular or stopped, administer artificial respiration.

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If exposed or concerned: Get medical advice/attention. If breathing has stopped, trained personnel should begin artificial respiration (AR) or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Immediately obtain medical attention and transport victim to an emergency care facility.

In case of inhalation, consult a doctor immediately and show him packing or label.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Mantain the ventilation and the oxygen delivery to the patient at a proper level. It could cause pulmonary sensitisation or asthma symptoms. Bronchodilators, expectorants and cough mixtures can help. Treat the bronchospasm with beta-2-agonists (by inhalation) and corticosteroids administrated orally or parenterally. Symptoms related to respiratory diseases can be shown with delayed effects, including pulmonary edema. People subjected to a significant exposure to the substance should be kept under medical supervision for 24-48 hours in case respiratory diseases appear. Ask for medical advice if alreay sensitized to isocyanates and exposed to other substances which can cause airways irritation or sensistisation. In case of exposure, the treatment depends on the symptoms and the clinical status of the patient. An excessive exposure to the substance could make preexisting medical conditions worse.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water.

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Carbon dioxide (CO2). Unsuitable extinguishing media: None in particular. Specific hazards arising from the chemical Do not inhale explosion and combustion gases. Burning produces heavy smoke. Hazardous combustion products: None Explosive properties: Not explosive Oxidizing properties: Not oxydant Special protective equipment and precautions for fire-fighters Use suitable breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures Wear personal protection equipment. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation. Use appropriate respiratory protection. See protective measures under point 7 and 8. Methods and materials for containment and cleaning up Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling Avoid contact with skin and eyes, inhalation of vapours and mists. Do not use on extensive surface areas in premises where there are occupants. Use localized ventilation system. Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. See also section 8 for recommended protective equipment. Advice on general occupational hygiene: Contamined clothing should be changed before entering eating areas. Do not eat or drink or smoke while working. Conditions for safe storage, including any incompatibilities Keep away from food, drink and feed. Incompatible materials: None in particular. Instructions as regards storage premises: Adequately ventilated premises. Storage temperature: Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI) - CAS: 9016-87-9 ACGIH - TWA(8h): 0.005 ppm

- **DNEL Exposure Limit Values**
 - Bis(isopropyl)naphthalene CAS: 38640-62-9

Consumer: 2.1 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

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Worker Industry: 4.3 mg/kg bw/d - Consumer: 2.1 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Industry: 30 ppm - Consumer: 7.4 ppm - Exposure: Human Inhalation -Frequency: Long Term, systemic effects PNEC Exposure Limit Values Bis(isopropyl)naphthalene - CAS: 38640-62-9 Target: Fresh Water - Value: 0.236 µg/l Target: Marine water - Value: 0.0236 µg/l Target: Freshwater sediments - Value: 0.853 mg/kg/d Target: Marine water sediments - Value: 0.085 mg/kg/d Target: Soil - Value: 0.171 mg/kg/d Target: STP - Value: 0.15 mg/l Target: Food chain - Value: 25 mg/kg/d Appropriate engineering controls: None Individual protection measures Eve protection: Use close fitting safety goggles, don't use eye lens. Protection for skin: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. Protection for hands: Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Use adequate protective respiratory equipment.

Thermal Hazards:

Wear protective gloves when handling the newly formed polymer in order to avoid burns. General hygiene conditions

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Value	Method:	Notes:
Appearance and colour:	Amber liquid		
Odour:	Slightly musty		
Odour threshold:	Not available		
pH:	Not available		
Melting point / freezing point:	Not available		Data referring to PMDI, CAS: 9016-87-9
Initial boiling point and boiling range:	>300 °C	DIN 53171	Data referring to PMDI, CAS: 9016-87-9
Solid/gas flammability:	N.A.		
Upper/lower flammability or explosive limits:	N.A.		
Vapour density:	Not available		
Flash point:	>200 °C	EN ISO 2719	Data referring to PMDI, CAS: 9016-87-9



Evaporation rate:	N.A.	
Vapour pressure:	<0.00001	 Data referring to PMDI, CAS: 9016-87-9
Relative density:	1.100 g/cc	
Solubility in water:	Insoluble	
Solubility in oil:	N.A.	
Partition coefficient (n- octanol/water):	N.A.	 reacts with water
Auto-ignition temperature:	Not pyrophoric	
Decomposition temperature:	Not available	
Viscosity:	3000 cps (25°C)	
Miscibility:	N.A.	
Fat Solubility:	N.A.	
Conductivity:	N.A.	
Substance Groups relevant properties	N.A.	

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

It may generate flammable gases on contact with elementary metals (alkalis and alkaline earth, alloys in powder or vapours) and powerful reducing agents.

It may generate toxic gases on contact with oxidising mineral acids, and powerful oxidising agents.

It may catch fire on contact with oxidising mineral acids, and powerful oxidising agents. Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the product:

- DUNAPOL® AD 3153 MCP
- a) acute toxicity
 - The product is classified: Acute Tox. 4 H332
- b) skin corrosion/irritation
 - The product is classified: Skin Irrit. 2 H315

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c) serious eye damage/irritation The product is classified: Eye Irrit. 2B H320 d) respiratory or skin sensitisation The product is classified: Resp. Sens. 1 H334; Skin Sens. 1 H317 e) germ cell mutagenicity Not classified Based on available data, the classification criteria are not met f) carcinogenicity Not classified Based on available data, the classification criteria are not met g) Reproductive toxicity/toxicity to fertility Not classified Based on available data, the classification criteria are not met h) STOT-single exposure The product is classified: STOT SE 3 H335 i) STOT-repeated exposure The product is classified: STOT RE 2 H373 i) aspiration hazard Not classified Based on available data, the classification criteria are not met Toxicological information of the main substances found in the product: Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI) - CAS: 9016-87-9 a) acute toxicity: Test: LC50 - Route: INHALDUST - Species: Rat = 0.49 mg/l - Duration: 4h Test: LC50 - Route: Aerosol inhalation - Species: Rat = 2.24 mg/l - Duration: 1h - Notes: Statements are derived from data of products with similar structure or composition. Test: LC50 - Route: Aerosol inhalation - Species: Rat = 0.387 mg/l - Duration: 4h - Notes: Statements are derived from data of products with similar structure or composition. Test: LD50 - Route: Dermal - Species: Rabbit > 9400 mg/kg Test: LD50 - Route: Oral - Species: Rat > 10000 mg/kg b) skin corrosion/irritation: Slightly irritating - Prolonged contact can cause mild skin irritation with local redness. It can stain the skin. c) serious eye damage/irritation: Slightly irritating - May cause moderate eye irritation. It can cause a mild and transient corneal lesion. d) respiratory or skin sensitisation: Test: Skin Sensitization - Result: Positive - Contact with the skin may cause an allergic skin reaction. Animal studies have shown that skin contact with isocyanates plays a role in respiratory sensitization. e) germ cell mutagenicity: Mutagenesis data for MDI are inconclusive. MDI is weakly positive in some in vitro studies;Other in vitro studies are negative. Mutagenesis studies in animals were fundamentally negative. f) carcinogenicity: Test: Respiratory Tract Irritant - Route: Inhalation - Species: laboratory animals - Result: Positive - Lung tumours have been observed in laboratory animals exposed to MDI/MDI (6 mg/m³) aerosol droplets during their lifetime. Tumors occurred simultaneously with irritation of the respiratory tract and wounds in the lungs. Current exposure guidelines ar g) Reproductive toxicity/toxicity to fertility: Test: Teratogenicity - Species: laboratory animals -Result: Negative - In laboratory animals MDI/MDI polymer did not cause congenital malformations; Other effects on the fetus occurred only at high doses, even toxic to the mother. h) STOT-single exposure: Route: Inhalation - Result: Positive - Notes: It can cause airways irritation i) STOT-repeated exposure: Route: Inhalation - Damage to upper respiratory tract and lung tissues has been observed 202135-USA/1



in laboratory animals after repeated high exposure to pure or polymeric MDI aerosols. j) aspiration hazard:

Route: Inhalation - Based on the physical properties, it is not likely to pose a suction hazard.

Bis(isopropyl)naphthalene - CAS: 38640-62-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 4000 mg/kg - Source: OECD TG 401

Test: NOEAL - Route: Oral - Species: Rat = 170 mg/kg

Test: LC50 - Route: Aerosol inhalation - Species: Rat > 5.6 mg/l - Source: OECD TG 403

- Test: LD50 Route: Dermal Species: Rat > 4000 mg/kg Source: OECD TG 402
- b) skin corrosion/irritation:

Test: Skin Irritant - Species: Rabbit -Result: Negative - Source: OECD TG 404 - Based on available data, the classification criteria are not met

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit -Result: Negative - Source: OECD TG 405 - Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation:

Species: Guinea pig -Result: Negative - Source: OECD TG 406 - Based on available data, the classification criteria are not met

e) germ cell mutagenicity:

Test: Mutagenesis - Species: Generic Bacteria -Result: Negative - Source: OECD TG 471 (Ames Test) - Based on available data, the classification criteria are not met

Test: MUTAG -Result: Negative - Source: OECD 473 + 476 - Based on available data, the classification criteria are not met

f) carcinogenicity:

Species: Rat -Result: Negative - Source: OECD TG 453 - Based on available data, the classification criteria are not met

g) Reproductive toxicity/toxicity to fertility:

Species: Rat -Résult: Négative - Source: OECD TG 414 - Based on available data, the classification criteria are not met

h) STOT-single exposure:

Based on available data, the classification criteria are not met

i) STOT-repeated exposure:

Based on available data, the classification criteria are not met

j) aspiration hazard:

Notes: It can be letal in case of ingestion or penetration through airways.

Substance(s) listed on the NTP report on Carcinogens:

None.

Substance(s) listed on the IARC Monographs:

Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI) - Group 3.

Substance(s) listed as OSHA Carcinogen(s):

None.

Substance(s) listed as NIOSH Carcinogen(s):

None.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment. DUNAPOL® AD 3153 MCP

Not classified for environmental hazards

Based on available data, the classification criteria are not met

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 24 - Notes: OECD 202:2004 - M1663

Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48 - Notes: OECD 202:2004

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- M1663

Endpoint: IC50 - Species: Algae - Pseudokirchnerella subcapitata > 100 mg/l - Duration h: 72 - Notes: OECD 201:2011 - M1662 Endpoint: LC50 - Species: Fish - Danio Rerio (zebrafish) > 100 mg/l - Duration h: 96 -Notes: OECD 203:1992 - M1664 Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI) -CAS: 9016-87-9 a) Aquatic acute toxicity: Endpoint: NOEC - Species: Algae - Desmodesmus subcapitata = 1640 mg/l - Duration h: 72 - Notes: OECD TG 201 Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 24 - Notes: OECD TG 202 Endpoint: LC50 - Species: Fish - Danio Rerio (zebrafish) > 1000 mg/l - Duration h: 96 -Notes: OECD TG 203 c) Toxicity to microorganism: Endpoint: EC50 - Species: Activated sludge > 100 mg/l - Duration h: 3 - 13 d) Terrestrial toxicity: Endpoint: EC50 - Species: Lumbricus - Eisenia Fetida > 1000 mg/kg - Duration h: 336 e) Plant toxicity: Endpoint: EC50 - Species: Oat - Avena sativa = 1000 mg/l - Duration h: 336 Endpoint: EC50 - Species: Lettuce - Lactuca sativa = 1000 mg/l - Duration h: 336 Bis(isopropyl)naphthalene - CAS: 38640-62-9 a) Aquatic acute toxicity: Endpoint: EC0 - Species: Daphnia = 0.16 mg/l - Duration h: 48 - Notes: DIN 38412 Endpoint: EC0 - Species: Algae = 0.15 mg/l - Duration h: 72 - Notes: OECD TG 201 Endpoint: LC0 - Species: Fish = 0.5 mg/l - Duration h: 96 - Notes: OECD TG 203 Endpoint: NOEC - Species: Daphnia = 0.013 mg/l - Duration h: 504 - Notes: OECD TG 202 Endpoint: LL50 - Species: Daphnia = 1.7 mg/l - Duration h: 48 - Notes: OECD TG 202 Persistence and degradability Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI) - CAS: 9016-87-9 Biodegradability: not biodegradable - Test: Oxygen consumption - Duration: 28 d - %: 0 -Notes: OECD TG 302 C Bis(isopropyl)naphthalene - CAS: 38640-62-9 Biodegradability: Readily biodegradable - Test: Photolysis in water Biodegradability: Not easily biodegradable Bioaccumulative potential Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI) - CAS: 9016-87-9 Bioaccumulation: Low bioaccumulation potential - Test: BCF - Bioconcentrantion factor 92 - Duration: 28 d - Notes: Low bioaccumulation potential Bis(isopropyl)naphthalene - CAS: 38640-62-9 Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentrantion factor 500 Mobility in soil Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI) - CAS: 9016-87-9 Notes: 07 Bis(isopropyl)naphthalene - CAS: 38640-62-9 Mobility in soil: Mobile - Test: Adsorption: log Koc (20°C) - calculated 4.5 - Notes: Low mobility Other adverse effects Isocianates react at the interface with water producing CO2 and an insoluble solid with high melting point (polyurea). The reaction is highly catalized by surfactants (e.g. liquid soap) and water-soluble solvents. According to the experience acquired so far, polyurea is inert and non-degradable..ec

13. DISPOSAL CONSIDERATIONS

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Waste treatment and disposal methods

Immediately after the last withdrawal of product, completely empty the containers (drained, free of granules and pasty residues). Empty packaging without residue can be delivered to a company specializing in disposal. In the EU this is done specifically by type of packaging taken from the collection centres of the existing recovery systems of the chemical industry. To this end, product and hazard markings must remain on the packaging. Recovery must be carried out in accordance with national legislation and environmental protection provisions. Do not dispose of in wastewater.

14. TRANSPORT INFORMATION

UN number Not classified as dangerous in the meaning of transport regulations. UN proper shipping name N.A. Transport hazard class(es) N.A. Packing group Ň.Ă. Environmental hazards ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No Most important toxic component: DUNAPOL® AD 3153 MCP Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code) N.A. Special precautions N.A.

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act TSCA inventory: all the components are listed on the TSCA inventory.
Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI) is listed in TSCA Section 8b, Section 8d HSDR
Bis(isopropyi)napritialene is listed in TSCA Section 8b.
Section 302 – Extremely Hazardous Substances: no substances listed
Section 304 – Hazardous substances: no substances listed.
Section 313 – Toxic chemical list: Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI).
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act No substances listed.
CAA - Clean Air Act
CAA listed substances:
None.
CWA - Clean Water Act
CVVA listed substances:
USA - State specific regulations
California Proposition 65
Substance(s) listed under California Proposition 65: None.
Massachusetts Right to know
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Substance(s) listed under Massachusetts Right to know:

No substances listed.

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

Diphenylmethane - 4,4'-diisocyanate, isomers (1) and homologues (2), blending of (1) and (2) (PMDI).

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know: No substances listed.

16. OTHER INFORMATION

Text of phrases referred to under heading 3:

H332 Harmful if inhaled.

H315 Causes skin irritation.

H320 Causes eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

Safety Data Sheet dated 1/4/2024, version 1 Disclaimer:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program

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OSHA: PNEC:	Occupational Safety and Health Administration Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average