SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

Revision date: 09-11-2026 **Revision Number:** 1

1. Identification

Product identifier

Product Name MIXEF611 MIXOPAKE NEON TRAFFIC GREEN

Other means of identification

Product Code FO00016046

Material number(s) FO00016046PW;FO00016046Z1;FO00016046Z5

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use For industrial use only

Restrictions on use None.

Details of the supplier of the safety data sheet

Supplier Address
Avient Corporation
33587 Walker Road, Avon Lake, OH 44012

E-mail address regulatoryservices@avient.com

Emergency telephone number

Company Phone Number 1 (440) 930-1000
or 1 (844) 4 AVIENT

24 Hour Emergency Phone Number CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident)

Emergency Telephone No information available

2. Hazard(s) identification

Classification of the substance or mixture

This product is not considered hazardous by the US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200).

Hazards not otherwise classified (HNOC)
Not applicable.

Label elements
No label elements required

Hazard statements
No hazard statements required

Hazards classified under paragraph (d)(1)(ii) of 1910.1200
No information available.

Other information
No information available.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Trade secret / Unique identifier
Polyvinyl chloride	9002-86-2	20 - 40%	*
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	6422-86-2	20 - 40%	*
Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine and 1,3,5-triazine-2,4,6-triamine	25035-72-7	10 - 20%	*
Sulfonic acids, C10-21-alkane, phenyl esters	91082-17-6	5 - 10%	*
Vinyl acetate-vinyl chloride copolymer	9003-22-9	5 - 10%	*
Carbonic acid, calcium salt (1:1)	471-34-1	5 - 10%	*
1,2-Cyclohexanedicarboxylic acid, 1-(phenylmethyl) ester, ester with 2,2,4-trimethyl-1,3-pentanediol mono(2-methylpropanoate)	1661012-65-2	3 - 5%	*
Titanium dioxide	13463-67-7	3 - 5%	*
Sepiolite (Mg2H2(SiO3)3.xH2O)	63800-37-3	0.1 - 1%	*
2-Ethylhexyl methyl terephthalate	63468-13-3	0.1 - 1%	*
2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-propenenitrile	30396-85-1	0.1 - 1%	*
Stearic acid	57-11-4	0.1 - 1%	*
Isobutane	75-28-5	0.1 - 1%	*
Quaternary ammonium compounds, benzyl-C14-18-alkyldimethyl, chlorides	68390-98-7	< 0.1%	*
C.I. Pigment Green 7	1328-53-6	< 0.1%	*
Silica, amorphous	7631-86-9	< 0.1%	*
COMP_MISC_PVC Plastisol/Dispersion (R05)	NA	< 0.1%	*
Soybean oil, epoxidized	8013-07-8	< 0.1%	*
Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides	61789-72-8	< 0.1%	*
Quartz	14808-60-7	< 0.1%	*
COMP_MISC_GEN	NA	< 0.1%	*
Formaldehyde	50-00-0	< 0.1%	*
C.I. Basic Red 1	989-38-8	< 0.1%	*
Xanthylium, 3,6-bis(diethylamino)-9-[2-(methoxycarbonyl)phenyl]-, (T-4)-tetrachlorozincate(2-) (2:1)	73398-89-7	< 0.1%	*
5-Benzoxazolesulfonamide, 2-[7-(diethylamino)-2-oxo-2H-1-benzopyran-3-yl]-	68427-35-0	< 0.1%	*
Vinyl chloride	75-01-4	< 0.1%	*

4. First-aid measures

Description of first aid measures

Inhalation	Move victim to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice and attention.
Skin contact	Do not try to remove solidified material from the skin. Wash skin with soap and water. Take off contaminated clothing and wash before reuse. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Rinse mouth. Do NOT induce vomiting. Get medical attention if symptoms occur.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. First aider: Pay attention to self-protection.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
Effects of Exposure	None.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	Do not use water jetstream.
Specific hazards arising from the chemical	No information available.
Hazardous combustion products	Decomposition products can include and are not limited to:. Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Ammonia. Fluorinated oxides. Hydrogen fluoride. Hydrogen chloride. Hydrogen sulfide. Sulfur oxides. Sulfur trioxide. Oxides of sulfur. Phosphorus oxides. Phosphine. Metal oxides.

Explosion data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Evacuate personnel to safe areas. Special danger of slipping by leaking/spilling product. See section 8 for more information.
For emergency responders	Use personal protection recommended in Section 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Avoid contact with skin and eyes.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep cool. Protect from sunlight. Protect from moisture.

8. Exposure controls/personal protection

Control Parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Polyvinyl chloride (9002-86-2)	TWA: 1 mg/m³ respirable particulate matter	-	-
Carbonic acid, calcium salt (1:1) (471-34-1)	-	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³; total dust TWA: 5 mg/m³; respirable dust
Titanium dioxide (13463-67-7)	TWA: 0.2 mg/m³ nanoscale respirable particulate matter TWA: 2.5 mg/m³ finescale respirable particulate matter	TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust	TWA: 2.4 mg/m³; CIB 63 fine TWA: 0.3 mg/m³; CIB 63 ultrafine, including engineered nanoscale IDLH: 5000 mg/m³
Stearic acid (57-11-4)	TWA: 10 mg/m³ inhalable particulate matter TWA: 3 mg/m³ respirable particulate matter	-	-
Isobutane (75-28-5)	STEL: 1000 ppm explosion hazard	-	TWA: 800 ppm; TWA: 1900 mg/m³;
C.I. Pigment Green 7 (1328-53-6)	TWA: 1 mg/m³ Cu dust and mist	-	TWA: 1 mg/m³; Cu dust and mist IDLH: 100 mg/m³ Cu dust and

			mist
Silica, amorphous (7631-86-9)	-	TWA: 20 mppcf TWA: (80)/(% SiO2) mg/m³ (vacated) TWA: 6 mg/m³ <1% Crystalline silica : (80)/(% SiO2) mg/m³ TWA	TWA: 6 mg/m³; IDLH: 3000 mg/m³
Quartz (14808-60-7)	TWA: 0.025 mg/m³ respirable particulate matter	TWA: 50 µg/m³ (vacated) TWA: 0.1 mg/m³ respirable dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	TWA: 0.05 mg/m³; respirable dust IDLH: 50 mg/m³ respirable dust
Formaldehyde (50-00-0)	TWA: 0.1 ppm STEL: 0.3 ppm DS RS	TWA: 0.75 ppm (vacated) TWA: 3 ppm unless specified in 1910.1048 STEL: 2 ppm see 29 CFR 1910.1048 (vacated) STEL: 10 ppm 30 min unless specified in 1910.1048 (vacated) Ceiling: 5 ppm unless specified in 1910.1048	TWA: 0.016 ppm; Ceiling: 0.1 ppm 15 min IDLH: 20 ppm
Vinyl chloride (75-01-4)	TWA: 1 ppm	TWA: 1 ppm STEL: 5 ppm see 29 CFR 1910.1017	-

Note See section 16 for terms and abbreviations.

Other information on limit values Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Biological occupational exposure limits This product, as supplied, contains materials that do not have reportable biological exposure limits or are not subject to the reporting requirements of the local jurisdiction.

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Paste
Physical state Liquid

Color	green
Odor (includes odor threshold)	Slight

Property	Values	Remarks • Method
Melting point / freezing point	No data available	None known
Boiling point (or initial boiling point or boiling range)	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
SADT (°C)	No data available	None known
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Solubility	No data available	None known
Water solubility	No data available	None known
Partition coefficient n-octanol/water (log value)	No data available	None known
Vapor pressure (includes evaporation rate)	No data available	None known
Evaporation rate	No data available	None known
Density and/or relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapor density	No data available	None known
Particle characteristics		None known
Particle Size	No data available	
Particle Size Distribution	No data available	

Other information

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. static discharge (electrostatic discharge). Storage near to reactive materials. Dust formation. Protect from moisture.

Incompatible materials Incompatible with strong oxidizers and with strong acids and bases (decomposes to form formaldehyde). At melt temperatures, acetal resins are incompatible with halogenated polymers such as vinyl (PVC) and any elastomers containing any halogenated polymers. At processing conditions, these materials are mutually destructive and involve rapid degradation. Even small amounts of such contaminants can cause sudden and spontaneous formaldehyde gas formation. Workplace fume well above threshold levels are a likely result. Unsafe pressurization of equipment such as extruder or mold can also result. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of halogenated materials from coming in contact with the acetal. Prevent contamination of virgin or rework resin.

Hazardous decomposition products None under normal use conditions.

11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on likely routes of exposure

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity Based on available data, the classification criteria are not met.

Numerical measures of toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfonic acids, C10-21-alkane, phenyl esters (91082-17-6)	5005 mg/kg (rat)	> 1055 mg/kg (Rat)	20001 ppm
Carbonic acid, calcium salt (1:1) (471-34-1)	-	> 2000 mg/kg (Rat)	-
1,2-Cyclohexanedicarboxylic acid, 1-(phenylmethyl) ester, ester with 2,2,4-trimethyl-1,3-pentanediol mono(2-methylpropanoate) (1661012-65-2)	5005 mg/kg (rat)	> 5000 mg/kg (Rabbit)	20001 ppm
Stearic acid (57-11-4)	-	> 2000 mg/kg (Rabbit)	-
Quaternary ammonium compounds, benzyl-C14-18-alkyldimethyl, chlorides (68390-98-7)	240 mg/kg (Rat)	1420 mg/kg (Rat)	20001 ppm
Silica, amorphous (7631-86-9)	-	> 5000 mg/kg (Rabbit)	-
Soybean oil, epoxidized (8013-07-8)	-	> 20000 mg/kg (Rabbit)	-
Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides (61789-72-8)	5005 mg/kg (rat)	> 5000 mg/kg (Rabbit)	20001 ppm
Formaldehyde (50-00-0)	100 mg/kg (Rat)	-	-
C.I. Basic Red 1 (989-38-8)	250 mg/kg (Rat)	-	-
Xanthylium, 3,6-bis(diethylamino)-9-[2-(methoxycarbonyl)phenyl]-, (T-4)-tetrachlorozincate(2-) (2:1) (73398-89-7)	200 mg/kg	> 5000 mg/kg (Rabbit)	-
5-Benzoxazolesulfonamide, 2-[7-(diethylamino)-2-oxo-2H-1-benzopyran-3-yl]- (68427-35-0)	-	> 2000 mg/kg (Rat)	-

Vinyl chloride (75-01-4)	500 mg/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Polyvinyl chloride (9002-86-2)	-	Group 3	-	-
Vinyl acetate-vinyl chloride copolymer (9003-22-9)	-	Group 3	-	-
Titanium dioxide (13463-67-7)	A3	Group 2B	-	X
Sepiolite (Mg2H2(SiO3)3.xH2O) (63800-37-3)	-	Group 3	-	-
Silica, amorphous (7631-86-9)	-	Group 3	-	-
Quartz (14808-60-7)	A2	Group 1	Known	X
Formaldehyde (50-00-0)	A1	Group 1	Known	X
C.I. Basic Red 1 (989-38-8)	-	Group 3	-	-
Vinyl chloride (75-01-4)	A1	Group 1	Known	X

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Based on available data, the classification criteria are not met.

Chemical name	Fish	Crustacea	Algae/aquatic plants	Toxicity to microorganisms
Sulfonic acids, C10-21-alkane, phenyl esters (91082-17-6)	-	-	-	-
1,2-Cyclohexanedicarboxylic acid, 1-(phenylmethyl) ester, ester with 2,2,4-trimethyl-1,3-pentanediol mono(2-methylpropanoate)	-	-	-	-

(1661012-65-2)				
Quaternary ammonium compounds, benzyl-C14-18-alkyldimethyl, chlorides (68390-98-7)	LC50: 0.223 - 0.46mg/L (96h, Lepomis macrochirus) LC50: 0.823 - 1.61mg/L (96h, Oncorhynchus mykiss) LC50: =2.4mg/L (96h, Oryzias latipes) LC50: =1.3mg/L (96h, Poecilia reticulata)	-	-	-
Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides (61789-72-8)	-	-	-	-
Formaldehyde (50-00-0)	LC50: 0.032 - 0.226mL/L (96h, Oncorhynchus mykiss)	LC50: =2mg/L (48h, Daphnia magna) EC50: 11.3 - 18mg/L (48h, Daphnia magna)	-	-
C.I. Basic Red 1 (989-38-8)	-	0.16 mg/L	-	-
Xanthylium, 3,6-bis(diethylamino)-9-[2-(methoxycarbonyl)phenyl]-, (T-4)-tetrachlorozincate(2-) (2:1) (73398-89-7)	0.98 mg/L	-	-	-

Chemical name	Earthworm	Avian	Honeybees
Sepiolite (Mg2H2(SiO3)3.xH2O) (63800-37-3)	Acute Toxicity: LC0 > 700000 mg/kg (Eisenia foetida, 14 Days soil dry weight) Acute Toxicity: LC50 > 900000 mg/kg (Eisenia foetida, 14 Days soil dry weight)	-	-

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Chemical name	Partition coefficient	Bioconcentration factor (BCF)	Trophic magnification factor (TMF)
Sulfonic acids, C10-21-alkane, phenyl esters (91082-17-6)	-	-	-
1,2-Cyclohexanedicarboxylic acid, 1-(phenylmethyl) ester, ester with 2,2,4-trimethyl-1,3-pentanediol mono(2-methylpropanoate) (1661012-65-2)	-	-	-
Quaternary ammonium compounds, benzyl-C14-18-alkyldimethyl, chlorides (68390-98-7)	-	-	-
Quaternary ammonium compounds, benzyl(hydrogenated tallow	-	-	-

alkyl)dimethyl, chlorides (61789-72-8)			
Formaldehyde (50-00-0)	0.35	-	-
Xanthylium, 3,6-bis(diethylamino)-9-[2-(methoxycarbonyl)phenyl]-, (T-4)-tetrachlorozincate(2-) (2:1) (73398-89-7)	4.2	-	-

Mobility in soil No information available.

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Regulations

The Rotterdam Convention Not applicable

International Inventories

TSCA Complies
DSL/NDSL Not determined
ENCS Not determined
IECSC Not determined
KECL Not determined
PICCS Not determined
AIIC Not determined
NZIoC Not determined
TCSI Not determined

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CAA (Clean Air Act)
This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product contains CaProp 65 substances above 0.1%!

Chemical name	California Proposition 65
Titanium dioxide (13463-67-7)	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Polyvinyl chloride (9002-86-2)	X	-	-
Carbonic acid, calcium salt (1:1) (471-34-1)	X	X	X
Titanium dioxide (13463-67-7)	-	X	X
Isobutane (75-28-5)	X	X	X
C.I. Pigment Green 7 (1328-53-6)	X	-	X
Silica, amorphous (7631-86-9)	X	X	X
Quartz (14808-60-7)	X	X	X
Formaldehyde (50-00-0)	X	X	X
C.I. Basic Red 1 (989-38-8)	X	X	X
Xanthylium, 3,6-bis(diethylamino)-9-[2-(methoxycarbonyl)phenyl]-, (T-4)-tetrachlorozincate(2-) (2:1) (73398-89-7)	X	-	X
Vinyl chloride (75-01-4)	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	**Health hazards** 0	**Flammability** 0	**Instability** 0	**Special hazards** -
HMIS	**Health hazards** 0	**Flammability** 0	**Physical hazards** 0	**Personal protection** -

Key or legend to abbreviations and acronyms used in the safety data sheet

List may include phrases which are not applicable to this product

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
ECEL	Existing Chemical Exposure Limit
EINECS	European Inventory of Existing Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
GHS	Globally Harmonized System
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
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
KECI	Korean 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
NDSL	Non-Domestic Substances List (Canada)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NTP	National Toxicology Program (United States)
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
OSHA	Occupational Safety and Health Administration of the US Department of Labor
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances

PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitizer
RS	Respiratory Sensitizer
S	Sensitizer
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

Key literature references and sources for data used to compile the SDS
U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
U.S. Environmental Protection Agency
U.S. EPA Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
U.S. Hazardous Substance Data Bank (HSDB)
International Uniform Chemical Information Database (IUCLID)
Japan National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
U.S. National Institute for Occupational Safety and Health (NIOSH)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

Revision date	09-11-2026
Revision Note	No information available.

Disclaimer

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End of Safety Data Sheet