Wyandotte Sanifect D2 Plus (AFCO 5531)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 05/08/2023 Version: 1.3

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Wyandotte Sanifect D2 Plus

Product Code: AFCO 5531

Intended Use of the Product

Use of the Substance/Mixture: RTU sanitizer for use on food contact surfaces. For professional use only.

Name, Address, and Telephone of the Responsible Party

Company

AFCO
800 Development Avenue
Chambersburg, PA 17201
T: 800-345-1329
www.afcocare.com

Emergency Telephone Number

Emergency Number : 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Flam. Liq. 4 H227
Eye Irrit. 2A H319

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS07

Signal Word (GHS-US) : Warning.

Hazard Statements (GHS-US) : H227 - Combustible liquid
H319 - Causes serious eye irritation

Precautionary Statements (GHS-US) : P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use appropriate media for extinction.
P403 - Store in a well-ventilated place.
P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. Flammable gas.

Unknown Acute Toxicity (GHS-US) Not available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	80-90	Not classified
Isopropyl alcohol	(CAS No) 67-63-0	10-20	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	(CAS No) 68424-85-1	0.016	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1-Decanaminium, N,N-dimethyl-N-octyl-, chloride	(CAS No) 32426-11-2	0.012	Skin Corr. 1B, H314 Eye Dam. 1, H318
1-Octanaminium, N,N-dimethyl-N-octyl-, chloride	(CAS No) 5538-94-3	0.0048	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute 1, H400
Didecyldimethylammonium chloride	(CAS No) 7173-51-5	0.0072	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Hydrogen peroxide	(CAS No) 7722-84-1	0.045	Ox. Liq. 1, H271 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation: vapour), H332 Skin Corr. 1A, H314 STOT SE 3, H335 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

The exact percentage of composition are withheld as a trade secret [29 CFR § 1910.1200 App E].

Full text of H-phrases: see section 16.

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for several minutes. Obtain medical attention if irritation persists. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation.

Inhalation: Inhalation of large amounts may cause respiratory irritation, drowsiness, or dizziness.

Skin Contact: None known.

Eye Contact: Causes serious eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Not available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam, dry chemical.
Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible liquid.
Explosion Hazard: May form flammable/explosive vapor-air mixture.
Reactivity: When heated to decomposition, emits toxic fumes. Flammable gas.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Use water spray or fog for cooling exposed containers.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products: Carbon oxides (CO, CO_2), hydrogen chloride.
Other information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid breathing (vapors, mist, spray). Avoid all contact with skin, eyes, or clothing.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).
Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or inert absorbents to prevent migration and entry into sewers or streams.
Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: When heated to decomposition, emits toxic fumes.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do no eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.
Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high temperatures, direct sunlight, heat, ignition sources, incompatible materials.
Incompatible Materials: Strong oxidizers.
Special Rules on Packaging: Keep only in original container.

Specific End Use(s): RTU sanitizer for use on food contact surfaces. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Isopropyl alcohol (67-63-0)		
Mexico	OEL TWA (mg/m³)	980 mg/m³
Mexico	OEL TWA (ppm)	400 ppm
Mexico	OEL STEL (mg/m³)	1225 mg/m³

Mexico	OEL STEL (ppm)	500 ppm
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (ppm)	400 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	980 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	980 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	1225 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	500 ppm
USA IDLH	US IDLH (ppm)	2000 ppm (10% LEL)
Ontario	OEL STEL (ppm)	400 ppm
Ontario	OEL TWA (ppm)	200 ppm
Québec	VECD (mg/m³)	1230 mg/m³
Québec	VECD (ppm)	500 ppm
Québec	VEMP (mg/m³)	985 mg/m³
Québec	VEMP (ppm)	400 ppm

Hydrogen peroxide (7722-84-1)		
Mexico	OEL TWA (mg/m³)	1.5 mg/m³
Mexico	OEL TWA (ppm)	1 ppm
Mexico	OEL STEL (mg/m³)	3 mg/m³
Mexico	OEL STEL (ppm)	2 ppm
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	1.4 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1.4 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	1 ppm
USA IDLH	US IDLH (ppm)	75 ppm
Ontario	OEL TWA (ppm)	1 ppm
Québec	VEMP (mg/m³)	1.4 mg/m³
Québec	VEMP (ppm)	1 ppm

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment: Safety glasses.

Materials for Protective Clothing: None usually needed.

Hand Protection: None usually needed.

Eye Protection: Safety glasses.

Skin and Body Protection: None usually needed.

Respiratory Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance : Clear, colorless

Odor : Alcohol

Odor Threshold	:	Not available
pH	:	5.0 - 6.0
Relative Evaporation Rate (butylacetate=1)	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	39°C (102°F)
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20°C	:	Not available
Specific Gravity	:	0.98
Solubility	:	Complete
Partition coefficient: n-octanol/water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge

SECTION 10: STABILITY AND REACTIVITY

Reactivity: When heated to decomposition, emits toxic fumes. Flammable gas.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high temperatures. Heat. Ignition sources. Combustible materials. Incompatible materials.

Incompatible Materials: Strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO_2). Hydrogen chloride. May release flammable gases.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified.

LD50 and LC50 Data: Not available.

Skin Corrosion/Irritation: Not classified. (**pH:** 5-6)

Serious Eye Damage/Irritation: Causes serious eye irritation. (**pH:** 5-6)

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified.

Teratogenicity: Not available.

Carcinogenicity: Not classified.

Specific Target Organ Toxicity (Repeated Exposure): Not classified.

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (Single Exposure): Not classified.

Aspiration Hazard: Not classified.

Symptoms/Injuries After Inhalation: Inhalation of large amounts may cause respiratory irritation, drowsiness, or dizziness.

Symptoms/Injuries After Skin Contact: None known.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Water (7732-18-5)	
LD50 Oral Rat	>90000 mg/kg

Hydrogen peroxide (7722-84-1)	
LD50 Oral Rat	376 mg/kg
LD50 Dermal Rabbit	2000 mg/kg
LC50 Inhalation Rat (mg/l)	2 g/m³ (Exposure time: 4 h)
IARC Group	3

Didecyldimethylammonium chloride (7173-51-5)	
LD50 Oral Rat	329 mg/kg
LD50 Dermal Rat	2001 mg/kg

Isopropyl alcohol (67-63-0)	
LD50 Oral Rat	4396 mg/kg
LD50 Dermal Rabbit	12800 mg/kg
LC50 Inhalation Rat (ppm)	16000 ppm (Exposure time: 8 h)
IARC Group	3

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Not classified.

Isopropyl alcohol (67-63-0)	
LC50 Fish 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	1000 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
LC50 Fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Other Aquatic Organisms 2	1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)

Hydrogen peroxide (7722-84-1)	
LC50 Fish 1	16.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	18 - 32 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 Fish 2	18 - 56 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

Persistence and Degradability

Wyandotte Sanifect D2 Plus (AFCO 5531)	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Wyandotte Sanifect D2 Plus (AFCO 5531)	
Bioaccumulative Potential	Not established.

Isopropyl alcohol (67-63-0)	
Log Pow	0.05 (at 25°C)

Hydrogen peroxide (7722-84-1)	
BCF fish 1	(no bioaccumulation)

Mobility in Soil Not available.

Other Adverse Effects

Other Information: Not classified.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT : Not regulated for transport.

14.2 In Accordance with IMDG : Not regulated for transport.

14.3 In Accordance with IATA : Not regulated for transport.

14.4 In Accordance with TDG : Not regulated for transport.

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Wyandotte Sanifect D2 Plus (AFCO 5531)	
SARA Section 311/312 Hazard Classes	Fire hazard.

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Isopropyl alcohol (67-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory. Listed on SARA Section 313 (Specific toxic chemical listings).	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0% (only if manufactured by the strong acid process, no supplier notification).

Hydrogen peroxide (7722-84-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory. Listed on SARA Section 302 (Specific toxic chemical listings).	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 (concentration >52%).

1-Octanaminium, N,N-dimethyl-N-octyl-, chloride (5538-94-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory.
1-Decanaminium, N,N-dimethyl-N-octyl-, chloride (32426-11-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory.
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory.
Didecyldimethylammonium chloride (7173-51-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory.

US State Regulations

Hydrogen peroxide (7722-84-1)
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances U.S. - New Jersey - Environmental Hazardous Substances List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New Jersey - Special Health Hazards Substances List U.S. - New York - Occupational Exposure Limits - TWAs U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term

Isopropyl alcohol (67-63-0)
U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728) U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances U.S. - New Jersey - Environmental Hazardous Substances List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New Jersey - Special Health Hazards Substances List U.S. - New York - Occupational Exposure Limits - TWAs RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List RTK - U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Texas - City of Austin - Aerosol Paint and Glue Restrictions U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)
U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term
Didecyldimethylammonium chloride (7173-51-5)
U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

Water (7732-18-5)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Didecyldimethylammonium chloride (7173-51-5)
Listed on the Canadian DSL (Domestic Substances List) inventory.
1-Octanaminium, N,N-dimethyl-N-octyl-, chloride (5538-94-3)
Listed on the Canadian DSL (Domestic Substances List) inventory.
1-Decanaminium, N,N-dimethyl-N-octyl-, chloride (32426-11-2)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Isopropyl alcohol (67-63-0)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Hydrogen peroxide (7722-84-1)
Listed on the Canadian DSL (Domestic Substances List) inventory.

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by those regulations.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 05/08/2023

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

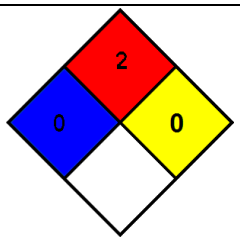
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation: vapour)	Acute toxicity (inhalation: vapour) Category 4
Eye Dam 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq 4	Flammable liquids Category 4
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
Ox. Liq. 1	Oxidizing liquids Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable vapors and liquid.
H271	May cause fire or explosion; strong oxidizer

H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation
H318	Causes serious eye damage.
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA Health Hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA Fire Hazard : 2 - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100°F but below 200°F (38/93°C).

NFPA Reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 0 - Minimal Hazard.

Flammability : 2 Moderate Hazard - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

Physical : 0 - Minimal Hazard.

Party Responsible for the Preparation of This Document

AFCO
800 Development Avenue
Chambersburg, PA 17201
T: 800-345-1329

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS SDS 2015 (U.S., Can., Mex.)