

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard

BUNA® CB 45

Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
1.10.002	19.09.2025	103000005315	Date of first issue: 30.07.2019

SECTION 1. IDENTIFICATION

Product name : BUNA® CB 45
Product code : 56736356

Manufacturer or supplier's details

Company name of supplier : ARLANXEO Netherlands B.V.
Global Regulatory Affairs and Product Safety
Address : Urmonderbaan 24
RD Geleen 6167 Netherlands

Emergency telephone number : Chemtrec +18004249300
Chemtrec Int'l. +17035273887
For Information: RAPS@arlanxeo.com

Recommended use of the chemical and restrictions on use

Recommended use : Additives for modifying plastics
Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION

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

Hazards for the product as supplied

Skin sensitisation : Category 1
Reproductive toxicity : Category 2

Other hazards

None known.

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.

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according to the OSHA Hazard Communication Standard



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1.10.002	19.09.2025	103000005315	Date of first issue: 30.07.2019

P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves, protective clothing, eye protection and face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Chemical nature : Butadiene rubber (BR)
Polymer

Components

Chemical name	CAS No./Unique ID	Concentration (% w/w)	Trade secret
Tris(nonylphenyl) Phosphite	26523-78-4*	>= 0,1 - <= 1	-
Phenol, 4-nonyl-, branched	84852-15-3*	>= 0,1 - <= 1	-

* Indicates that the identifier is a CAS No.

SECTION 4. FIRST AID MEASURES

General advice : Keep warm and in a quiet place.
If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
In case of skin contact : Wash off with soap and water.
Get medical attention if symptoms appear.
In case of eye contact : Flush eyes with water as a precaution.
Get medical attention if symptoms appear.
If swallowed : Get medical attention if symptoms appear.
Most important symptoms and effects, both acute and delayed : No information available.
May cause an allergic skin reaction.
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SAFETY DATA SHEET

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1.10.002	19.09.2025	103000005315	Date of first issue: 30.07.2019

Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Dry chemical
Carbon dioxide (CO₂)
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
- 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.

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.
Do not touch or walk through spilled material.
Evacuate personnel to safe areas.
Keep unnecessary and unprotected personnel from entering.
Use personal protective equipment.
- Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods and materials for containment and cleaning up : Move containers from spill area.
Vacuum or sweep up material and place in a designated, labeled waste container.
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

- Conditions for safe storage : Store in accordance with local regulations.
Store away from incompatible materials (see section 10) and food and drink.
Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible

SAFETY DATA SHEET

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BUNA® CB 45

Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
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materials (see Section 10) and food and drink.
Keep container closed when not in 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.

Recommended storage temperature : < 104 °F / < 40 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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.
In case of dust formation particle filter.

Filter type : P1 filter

Hand protection

Material : Permeation resistant gloves.

Remarks : Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection : Safety goggles

Skin and body protection : Wear suitable protective clothing.
Wear cloth work clothing including long pants and long-sleeved shirts.

Hygiene measures : Remove contaminated clothing and protective equipment before entering eating areas.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : bales

Colour : yellowish

Odour : rubber

pH : substance/mixture is non-soluble (in water)

Melting point/ range : Not applicable

Boiling point/boiling range : Decomposition: Decomposes below the boiling point.

Flash point : Not applicable

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



BUNA® CB 45

Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
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Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Not classified as a flammability hazard
Self-ignition	:	Not applicable
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Relative density	:	Not applicable
Density	:	0,90 g/cm ³ (68 °F / 20 °C)
Solubility(ies)	:	
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	> 752 °F / 400 °C
Viscosity	:	
Viscosity, kinematic	:	Not applicable
Particle characteristics	:	
Particle size	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	The product is stable.
Possibility of hazardous reactions	:	None known.
Conditions to avoid	:	Extremes of temperature and direct sunlight.
Incompatible materials	:	No specific data.

Hazardous decomposition products

Hazardous decomposition products	:	No hazardous decomposition products are known.
Thermal decomposition	:	Caused by smouldering and incomplete combustion toxic fumes mainly consisting of CO and CO ₂ may be developed. Degradation products of the polymers and their additives may also be formed.

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard

BUNA® CB 45

Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
1.10.002	19.09.2025	103000005315	Date of first issue: 30.07.2019

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

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

Components:

Tris(nonylphenyl) Phosphite:

Acute oral toxicity : LD50 (Rat): 16.200 - 22.800 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402

Phenol, 4-nonyl-, branched:

Acute oral toxicity : LD50 (Rat): 1.300 mg/kg

TDLo (Rat): 10 mg/kg

Acute dermal toxicity : LDLo (Rabbit): 3.160 mg/kg

Skin corrosion/irritation

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

Components:

Tris(nonylphenyl) Phosphite:

Species : Rabbit
Result : No skin irritation

Phenol, 4-nonyl-, branched:

Species : Rabbit
Result : Causes burns.

Serious eye damage/eye irritation

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

Components:

Tris(nonylphenyl) Phosphite:

Species : Rabbit
Result : No eye irritation

Phenol, 4-nonyl-, branched:

Species : Rabbit
Result : Corrosive

SAFETY DATA SHEET

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BUNA® CB 45

Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
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Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

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

Components:

Tris(nonylphenyl) Phosphite:

Result : May cause sensitisation by skin contact.

Phenol, 4-nonyl-, branched:

Exposure routes : Skin contact
Species : Guinea pig
Result : Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

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

Components:

Tris(nonylphenyl) Phosphite:

Genotoxicity in vitro : Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Carcinogenicity

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

IARC No component 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 component 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 fertility or the unborn child.

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



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Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
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Components:

Tris(nonylphenyl) Phosphite:

Effects on fertility : Species: Rat
Application Route: Oral
General Toxicity - Parent: NOAEL: 167 mg/kg body weight
Symptoms: No effects on fertility
Method: OECD Test Guideline 416

Species: Rat, male and female
Application Route: Oral
General Toxicity - Parent: NOAEL: 200 mg/kg body weight
Method: OECD Test Guideline 421

Effects on foetal development : Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 200 mg/kg body weight
Teratogenicity: NOAEL F1: ≥ 1.000 mg/kg body weight
Method: OECD Test Guideline 421
Result: No teratogenic potential

Phenol, 4-nonyl-, branched:

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

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.

Repeated dose toxicity

Components:

Phenol, 4-nonyl-, branched:

Species : Rat, male and female
NOAEL : 100 mg/kg
Application Route : Oral
Exposure time : 28 d
Method : OECD Test Guideline 407
Remarks : Subacute toxicity

Species : Rat, male and female
NOAEL : 50 mg/kg
Application Route : Oral
Exposure time : 28 d
Method : OECD Test Guideline 407
Remarks : Subchronic toxicity

Aspiration toxicity

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

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Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
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Further information

Product:

Remarks : Under the recommended processing conditions small amounts of emitted substance (e.g. residual monomers, residual solvents, decomposition products) may be discharged. According to our experience and information the product has no harmful effects on health if properly handled.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Tris(nonylphenyl) Phosphite:

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0,3 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: water extractable fraction
Toxicity to algae/aquatic plants	: ErC50 (Scenedesmus capricornutum (fresh water algae)): > 100 mg/l End point: Growth rate Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Scenedesmus capricornutum (fresh water algae)): 100 mg/l End point: Growth rate Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	: 1
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC (Daphnia magna (Water flea)): > 0,1 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	: 1
Phenol, 4-nonyl-, branched:	
Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 0,117 - 0,141 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0,14 mg/l Exposure time: 48 h

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



BUNA® CB 45

Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
1.10.002	19.09.2025	103000005315	Date of first issue: 30.07.2019

Method: Regulation (EC) No. 440/2008, Annex, C.2

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 1,3 mg/l
Exposure time: 72 h

EC10 (Desmodesmus subspicatus (green algae)): 0,5 mg/l
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0,006 mg/l
Exposure time: 91 d

M-Factor (Chronic aquatic toxicity) : 10

Toxicity to microorganisms : EC50 (activated sludge): 950 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Persistence and degradability

Components:

Tris(nonylphenyl) Phosphite:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: < 4 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

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.

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BUNA® CB 45

Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
1.10.002	19.09.2025	103000005315	Date of first issue: 30.07.2019

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)
n-Hexane	110-54-3	5000
1,3-Butadiene	106-99-0	10

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS 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 sensitisation
Reproductive toxicity

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

n-Hexane	110-54-3
4-Vinylcyclohexene (4-VCH)	100-40-3
1,3-Butadiene	106-99-0

SAFETY DATA SHEET

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BUNA® CB 45

Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
1.10.002	19.09.2025	103000005315	Date of first issue: 30.07.2019

Pennsylvania Right To Know

n-Hexane	110-54-3
4-Vinylcyclohexene (4-VCH)	100-40-3
1,3-Butadiene	106-99-0

Maine Chemicals of High Concern

1,3-Butadiene	106-99-0
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Vermont Chemicals of High Concern

Phenol, 4-nonyl-, branched	84852-15-3
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Washington Chemicals of High Concern

Phenol, 4-nonyl-, branched	84852-15-3
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California Prop. 65

WARNING: This product can expose you to chemicals including 4-Vinylcyclohexene (4-VCH), 1,3-Butadiene, which is/are known to the State of California to cause cancer, and n-Hexane, 4-Vinylcyclohexene (4-VCH), 1,3-Butadiene, 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%.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

TSCA list

No substances are subject to a Significant New Use Rule.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements:

Phenol, 4-nonyl-, branched	84852-15-3
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SECTION 16. OTHER INFORMATION

Further information

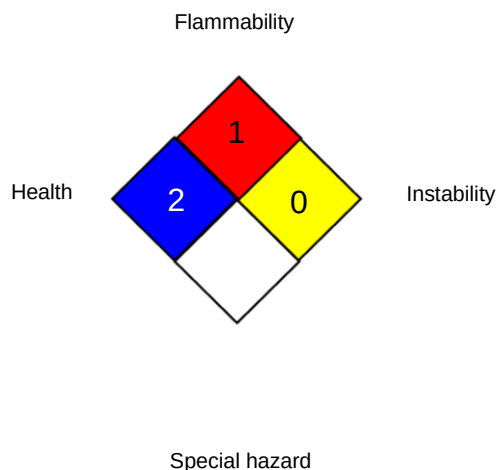
SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard

BUNA® CB 45

Version	Revision Date:	SDS Number:	Date of last issue: 20.10.2020
1.10.002	19.09.2025	103000005315	Date of first issue: 30.07.2019

NFPA 704:



HMIS® IV:

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		0

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

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 Harmonised 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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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 - Organisation 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 Con-

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1.10.002	19.09.2025	103000005315	Date of first issue: 30.07.2019

trol Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 19.09.2025

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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 a 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.

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