



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date 2-Jan-2023

Revision Number 5

According to Article 31 of the Regulation (EC) No 1907/2006 (REACH), a Safety Data Sheet (SDS) must be provided for hazardous substances or preparations. This product does not meet the classification criteria of the Regulation (EC) No 1272/2008 (CLP). Therefore, such document is outside the scope of Article 31 of REACH and the requirements for content in each section do not apply.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Group: Steam Activated Carbon Powder; S-PAC

Product Names:

DARCO® FGD DARCO® FGL DARCO® FM-1 DARCO® FP-1 DARCO® G 60 DARCO® GFP DARCO® GRO-SAFE DARCO® Hg DARCO® Hg EXTRA DARCO® Hg-BD DARCO® Hg-H DARCO® Hg-HR DARCO® S-51 DARCO® S-51A DARCO® S-51FF DARCO® S-51H DARCO® S-51HF HYDRODARCO® A HYDRODARCO® B HYDRODARCO® BSP HYDRODARCO® C HYDRODARCO® DXE HYDRODARCO® FX HYDRODARCO® LA HYDRODARCO® LC HYDRODARCO® LD HYDRODARCO® R - FX HYDRODARCO® S HYDRODARCO® W	NORIT® A SPECIAL E 153 NORIT® A SUPRA NORIT® A SUPRA EUR NORIT® A SUPRA USP NORIT® A ULTRA E 153 NORIT® AZO NORIT® B280FF NORIT® B SUPRA EUR NORIT® B SUPRA USP NORIT® B TEST EUR NORIT® B TEST USP NORIT® C EXTRA USP NORIT® D 10 NORIT® D ULTRA NORIT® DRK 1 NORIT® DX 1 NORIT® DX 10 NORIT® DX ULTRA NORIT® E SUPRA USP NORIT® G 60 NORIT® GH NORIT® GSX NORIT® GSX CAT NORIT® HBE SUPER NORIT® HX ULTRA	NORIT® IMPART 280 NORIT® PAC 20BC NORIT® PAC 20BF NORIT® PAC 20R NORIT® PAC 20RZ NORIT® PAC 200 NORIT® PAC 200 C NORIT® PAC 900 NORIT® PAC 1000 NORIT® PAC BC NORIT® PN 2 NORIT® SA 2 NORIT® SA 4 NORIT® SA 4 PAH NORIT® SA 4 PAH-HF NORIT® SA 5 D NORIT® SA 5 PAH HF NORIT® SA PLUS NORIT® SA SUPER D NORIT® SA SUPER DD NORIT® SA SUPER NORIT® SA UF NORIT® SA ULTRA PAH NORIT® SAE SUPER NORIT® SoilPure	NORIT® SX 1 NORIT® SX 1 G NORIT® SX 1 G CAT NORIT® SX 2 NORIT® SX PLUS NORIT® SX PLUS F CAT NORIT® SX PLUS LC NORIT® SX PLUS CAT NORIT® SX SUPER NORIT® SX SUPER E 153 NORIT® SX SUPER S NORIT® SX ULTRA NORIT® SX ULTRA CAT NORIT® VETERINAIR NORIT® W28 NORIT® W35 NORIT® W52 NORIT® ZN 2
---	---	---	--

REACH registration number: 01-2119488894-16

Synonyms: Activated carbon

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Liquid and vapor applications (purification, decolorization, separation, catalyst and deodorization)

Uses advised against: None known

1.3. Details of the supplier of the safety data sheet

Norit Nederland B.V.
Astronaut 34
Amersfoort
3824 MJ
The Netherlands
Tel: +31 33 464 8911
Fax: +31 33 461 7429

E-mail address: sdssupport@norit.com

1.4. Emergency telephone number

Emergency Telephone Number: The Netherlands CHEMTREC: +(31)-858880596
International CHEMTREC: +1 703-741-5970 or +1-703-527-3887
US: CHEMTREC: +1-703-527-3887 or 1-800-424-9300

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

Signal word

None

Hazard statements

None

Precautionary Statements - EU (§28, 1272/2008)

None

2.3. Other Hazards

This substance is classified as hazardous as a combustible dust by the United States 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Hazardous Products Regulation (HPR) 2015. The signal word, hazard statement and precautionary statements in the United States and Canada are: WARNING May form combustible dust concentrations in

air. Keep away from all ignition sources including heat, sparks and flame. Prevent dust accumulations to minimize explosion hazard.

This substance does not fulfill the criteria for PBT or vPvB.

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Activated carbon (especially when wet) can deplete oxygen from air in enclosed spaces, and dangerously low levels of oxygen may result. Prior to entering a confined space that contains or previously contained activated carbon, the space should be evaluated for oxygen and carbon monoxide concentrations, and any other hazards, by a qualified person.

Workers should also take appropriate precautions when dealing with spent (used) activated carbons which may exhibit hazardous properties associated with the adsorbed materials.

Avoid generation of dust. Powdered material may form an explosible dust-air mixture. If transferring product under pressure, avoid generation of dust if an ignition source is present.

Activated carbons have high surface area which may cause self-heating during oxidation. See section 5.

Do not generate dust because airborne respirable crystalline silica may be generated.

May cause mechanical irritation. Dust may be irritating to respiratory tract.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name	Weight-%	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Activated Carbon 7440-44-0	100	01-2119488894-16	931-328-0	-	-	-	-

4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation	If cough, shortness of breath or other breathing problems occur, move to fresh air. Seek medical attention if symptoms persist. If necessary, restore normal breathing through standard first aid measures.
Eye contact	In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
Skin contact	Wash skin with soap and water. Get medical attention if symptoms occur.
Ingestion	Do NOT induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms See Section 11 for additional Toxicological Information.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use foam, carbon dioxide (CO₂), dry chemical or water spray. A fog is recommended if water is used.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire. DO NOT USE high pressure media which could cause formation of a potentially explosible dust-air mixture. In the event of a fire, spreading large amounts of activated carbon is not recommended due to the risk of creating uncontrolled dust emissions.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Burning produces irritant fumes. If transferring product under pressure, avoid generation of dust if an ignition source is present.

Activated carbons have high surface area which may cause self-heating during oxidation. An adequate air gap between packages of activated carbon is recommended to reduce risk of propagation of the event. Activated carbon is difficult to ignite and tends to burn slowly (smolder) without producing smoke or flame.

Hazardous combustion products Materials allowed to smolder for long periods in enclosed spaces may produce amounts of carbon monoxide which reach the lower explosive limit (carbon monoxide LEL = 12.5% in air), Used activated carbon may produce additional combustion products which are based on the substance(s) adsorbed, Carbon monoxide, Carbon dioxide (CO₂)

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters In case of fire: Wear self-contained breathing apparatus. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid generation of dust. Ensure adequate ventilation. Use personal protective equipment as required. See section 8.

Other information Refer to protective measures listed in Sections 7 and 8

6.2. Environmental precautions

Environmental precautions No special environmental measures are necessary. Local authorities should be advised if significant spillages cannot be contained.

6.3. 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 Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation. If the spilled material contains dust or has the potential to create dust, use explosion-proof vacuums and/or cleaning systems suitable for combustible dusts. Use of a vacuum with high efficiency particulate air (HEPA) filtration is recommended. Do not create a dust cloud by using a brush or compressed air. Pick up and transfer to properly labeled containers. Spent granular activated carbon may be recyclable. Dispose of virgin (unused) carbon (surplus or spillage) in a facility permitted for non-hazardous wastes. Spent (used) carbon should be disposed of in accordance with applicable laws. Do not reuse empty bags; dispose of in a facility permitted for non-hazardous wastes. See section 13.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Avoid generation of dust. Do not breathe dust. Provide appropriate local exhaust ventilation at machinery and at places where dust can be generated. Do not create a dust cloud by using a brush or compressed air. Dust can form an explosive mixture with air.

Activated carbons have high surface area which may cause self-heating during oxidation. Take precautionary measures against static discharges. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations. Fine dust is capable of penetrating electrical equipment and may cause electrical shorts. If hot work (welding, torch cutting, etc.) is required the immediate work area must be cleared of product and dust.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Eliminate sources of ignition. Do not store together with strong oxidizing agents. Do not store together with volatile chemicals as they may be adsorbed onto product. Keep in properly labeled containers. Activated carbon is difficult to ignite and tends to burn slowly (smolder) without producing smoke or flame. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosible mixture if they are released in the atmosphere in sufficient concentrations. Prior to entering a confined space that contains or previously contained activated carbon, the space should be evaluated for oxygen and carbon monoxide concentrations, and any other hazards, by a qualified person.

7.3. Specific end use(s)

Risk Management Methods (RMM) Per Article 14.4 of the REACH Regulation no exposure scenario has been developed as the substance is not hazardous.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Exposure limits for components or similar components are stated below.

Chemical name	Activated Carbon 7440-44-0
Austria	TWA: 5 mg/m ³ STEL 10 mg/m ³
Poland	TWA: 6 mg/m ³
Chemical name	Quartz (respirable) 14808-60-7
European Union	TWA: 0.1 mg/m ³
Austria	TWA: 0.05 mg/m ³ alveolar dust, respirable fraction
Belgium	TWA: 0.1 mg/m ³ alveolar dust
Bulgaria	TWA: 0.1 mg/m ³
Czech Republic	TWA: 0.1 mg/m ³ dust
Denmark	TWA: 0.3 mg/m ³ total; 0.1 mg/m ³ respirable
Finland	TWA: 0.05 mg/m ³ respirable dust
France	TWA: 0.1 mg/m ³ alveolar fraction
Greece	TWA: 0.1 mg/m ³
Hungary	TWA: 0.1 mg/m ³ respirable
Ireland	TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³
Italy REL	TWA: 0.025 mg/m ³ respirable fraction
Netherlands	TWA: 0.075 mg/m ³ respirable fraction
Norway	TWA: 0.3 mg/m ³ total dust; 0.1 mg/m ³ respirable dust STEL: 0.9 mg/m ³ total dust; 0.3 mg/m ³ respirable dust
Poland	TWA: 0.1 mg/m ³ respirable fraction
Portugal	TWA: 0.025 mg/m ³ respirable fraction
Romania	TWA: 0.1 mg/m ³ dust, respirable fraction
Slovakia	TWA: 0.1 mg/m ³ STEL: 0.5 mg/m ³
Spain	TWA: 0.05 mg/m ³ respirable fraction
Sweden	NGV: 0.1 mg/m ³ respirable fraction
Switzerland	TWA: 0.15 mg/m ³ respirable dust
United Kingdom	TWA: 0.1 mg/m ³
ACGIH TLV	TWA: 0.025 mg/m ³ respirable particulate matter
Chemical name	Dust, or particulates not otherwise specified RR-00072-6
Belgium	TWA: 3 mg/m ³ alveolar fraction; 10 mg/m ³ inhalable fraction
France	TWA: 10 mg/m ³ inhalable; 5 mg/m ³ alveolar fraction
Ireland	TWA: 10 mg/m ³ total inhalable; 4 mg/m ³ respirable STEL: 30 mg/m ³ total inhalable, calculated; 12 mg/m ³ respirable, calculated
Italy REL	TWA: 10 mg/m ³ inhalable particles, calculated; 3 mg/m ³ respirable particles, calculated
Norway	TWA: 10 mg/m ³ total dust; 5 mg/m ³ respirable dust STEL: 20 mg/m ³ total dust, calculated; 10 mg/m ³ respirable dust, calculated

Portugal	TWA: 10 mg/m ³ inhalable fraction; 3 mg/m ³ respirable fraction
Slovakia	TWA: 10 mg/m ³
Spain	TWA: 10 mg/m ³ inhalable fraction; 3 mg/m ³ respirable fraction
ACGIH TLV	TWA: 10 mg/m ³ inhalable particles, recommended TWA: 3 mg/m ³ respirable particles, recommended

Derived No Effect Level (DNEL) As required under the EU Registration, Evaluation and Authorization of Chemicals (REACH) regulation, the Activated Carbon REACH Consortium (of which Norit is a member) developed the following Derived No Effect Levels (DNELs) for Activated Carbon based on a 90-day repeated dose inhalation toxicity study in rats: DNEL_{worker} of 1.8 mg/m³ (respirable) and DNEL_{consumer} of 0.9 mg/m³ (respirable).

Predicted No Effect Concentration (PNEC) According to the guidelines of the EU Registration, Evaluation and Authorization of Chemicals (REACH), a Predicted No Effect Concentration (PNEC)_{soil} of 10 mg/kg soil was derived based on an earthworm reproduction study. No other PNECs are derived.

8.2. Exposure controls

Engineering controls Ensure adequate ventilation to maintain exposures below occupational limits. Provide appropriate exhaust ventilation at machinery and at places where vapors from hot product or dust can be generated. Ensure that eyewash stations and safety showers are close to the workstation location.

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. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

Respiratory protection Approved respirator may be necessary if local exhaust ventilation is not adequate.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No special environmental measures are necessary. Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties

Information given is based on data obtained from this substance or from similar substances.

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder
Color	Black
Odor	Generally odorless. May produce slight sulfur smell when wet.
Odor threshold	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		Not applicable
Boiling point / boiling range		Not applicable
Flammability (solid, gas)	Not flammable	
Flammability Limit in Air		Not applicable
Flash point		Not applicable
Autoignition temperature		No data available
Decomposition temperature		Not applicable
pH		Not applicable
Kinematic viscosity		Not applicable
Dynamic viscosity		Not applicable
Water solubility	insoluble	@ 20 °C, OECD 105
Solubility(ies)		Not applicable
Partition coefficient		Not applicable
Vapor pressure		Not applicable
Relative density		No data available
Bulk density	150-650 kg/m ³	
Relative vapor density		Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

Minimum Explosive Conc.	20 g/m ³	ASTM E-1515
Minimum Ignition Temperature	480 °C	ASTM E-1491
Minimum Ignition Energy	> 500 mJ	ASTM E-2019 and IEC 61241-2-3
Maximum Pressure Rise	8 bar	ASTM E-1226
Maximum Rate of Pressure Rise	465 bar/sec	ASTM E-1226
K _{st}	126 bar.m/s	ASTM E-1226
Explosive properties	Dust may form explosible mixture in air, Dust explosion category: ST 1	
Oxidizing properties		Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity May react exothermically upon contact with strong oxidizers.

10.2. Chemical stability

Stability Stable under normal conditions. Stable under recommended storage conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Dust can form an explosive mixture with air. Avoid generation of dust. Do not create a dust cloud by using a brush or compressed air. Take precautionary measures against static discharges. All metal parts of the mixing and processing equipment must be earthed/grounded. Ground and bond containers when transferring material.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

10.4. Conditions to avoid

Conditions to avoid dust formation. Keep away from heat. Eliminate sources of ignition. Activated carbon (especially when wet) can deplete oxygen from air in enclosed spaces, and dangerously low levels of oxygen may result.

Activated carbons have high surface area which may cause self-heating during oxidation.

10.5. Incompatible materials

Incompatible materials Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products Materials allowed to smolder for long periods in enclosed spaces may produce amounts of carbon monoxide which reach the lower explosive limit (carbon monoxide LEL = 12.5% in air), Used activated carbon may produce additional combustion products which are based on the substance(s) adsorbed, Carbon oxides

SECTION 11: Toxicological information

Information given is based on data obtained from this substance or from similar substances.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Oral LD50 > 2000 mg/kg (rat); OECD 423.

Dermal LD50 Absorption highly unlikely, no health effects known.

Inhalation LC50 > 8.5 mg/l (rat, 1 hr); OECD 403.

Skin corrosion/irritation Not classified. Skin irritation test, rabbit (OECD 404): Not irritating.

Serious eye damage/eye irritation Not classified. Eye irritation test, rabbit (OECD 405): Not irritating.

Respiratory or skin sensitization Not classified. Not sensitizing based on Local Lymph Node Assay (OECD 429).

Germ cell mutagenicity Not classified.
 - Gene mutation in bacteria (Bacterial Reverse Mutation Assay/Ames) (OECD 471): not mutagenic.
 - In vitro Mammalian Chromosome Aberration Test (OECD 473): not clastogenic.
 - In vitro Mammalian Cell Gene Mutation Test (OECD 476): non-mutagenic.

Carcinogenicity Not classified.

Reproductive toxicity Not classified. Repeated dose inhalation toxicity test showed no reproductive target

organ effects, and a toxicokinetic study showed no product migration to reproductive organs.

STOT - single exposure

Not classified.

STOT - repeated exposure

Not classified. Repeated dose toxicity study, inhalation (rat) 90 days (OECD 413): NOAEC 7.29 mg/m³ (respirable). This test was conducted on activated carbon containing negligible crystalline silica; therefore activated carbon itself is not classified for STOT-RE. Although respirable crystalline silica is classified as STOT-RE1, this product contains <1% respirable crystalline silica, therefore it is not classified for STOT-RE.

Aspiration hazard

Based on industrial experience and available data, no aspiration hazard is expected.

11.2. Information on other hazards**11.2.1. Endocrine disrupting properties****Endocrine disrupting properties**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

11.2.2. Other information**Other adverse effects**

No information available.

SECTION 12: Ecological information

Information given is based on data obtained from this substance or from similar substances.

12.1. Toxicity**Ecotoxicity**

Non toxic. The substance is highly insoluble in water and the substance is unlikely to cross biological membranes. No adverse ecological effects are known.

12.2. Persistence and degradability**Persistence and degradability**

Not expected to degrade.

12.3. Bioaccumulative potential**Bioaccumulation**

Not expected due to physicochemical properties of the substance.

12.4. Mobility in soil**Mobility**

Not expected to migrate. Insoluble.

12.5. Results of PBT and vPvB assessment**PBT and vPvB assessment**

This substance does not fulfill the criteria for PBT or vPvB.

12.6. Endocrine disrupting properties

Endocrine disrupting properties The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Activated carbon, in its original state, is not a hazardous material or hazardous waste. Follow applicable regulations for waste disposal.

Spent (used) activated carbon may be classified as a hazardous waste depending upon its use, the substance(s) adsorbed, and how it is ultimately managed. Follow applicable regulations for disposal.

Recycling (reactivation) may be a viable alternative to disposal. Dust formation from residues in packaging should be avoided and suitable worker protection assured. Store used packaging in enclosed receptacles.

Contaminated packaging Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Waste codes / waste designations according to EWC / AVV Waste hierarchy to be followed (Directive 2008/98/EC on waste, article 4).

SECTION 14: Transport information

Note: This activated carbon product is made by a steam activation process.

IATA

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Germany**

Water hazard class (WGK)	non-hazardous to water (nwg)
--------------------------	------------------------------

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
TCSI	Complies
NZIoC	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

TCSI - Taiwan Chemical Substance Inventory

NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

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

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 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
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Prepared by: Norit B.V. - Safety, Health and Environmental Affairs

Revision date: 2-Jan-2023

Disclaimer:

The information set forth is based on information that Norit believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and Norit assumes no legal responsibility for use or reliance thereon. In the event of a discrepancy between the information on the non-English document and its English counterpart, the English version shall supersede.

DARCO®, GRO-SAFE®, HYDRODARCO® and NORIT® trademarks are owned by Norit B.V. or its affiliates.

End of Safety Data Sheet