

STAY-C® 50**5016285**

Version 2.1

Revision Date 07/09/2024

Date of last issue: 11/21/2022

SECTION 1. IDENTIFICATION

Product name : STAY-C® 50

Substance name : L-Ascorbic acid, 2-(dihydrogen phosphate), trisodium salt

Manufacturer or supplier's details

Company name of supplier : DSM Nutritional Products LLC

Address : 250 Plainsboro Road
Plainsboro NJ 08536

Telephone : (609) 452-1000

Emergency telephone number : 1-800-424-9300 (24 HR CHEMTREC, CA & US); Outside CA & US +1-703-572-3887 (COLLECT CALLS ACCEPTED)

E-mail address of person responsible for the SDS : sds.nutritionalproducts@dsm.com

Recommended use of the chemical and restrictions on use

Recommended use : Ingredient for personal care products

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Not a hazardous substance or mixture.

GHS label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : sodium ascorbyl phosphate (INCI)

Molecular formula : C₆H₆O₉Na₃P • 2H₂O

Brief description of the product : Substance

Substance name : L-Ascorbic acid, 2-(dihydrogen phosphate), trisodium salt

CAS-No. : 66170-10-3

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
L-Ascorbic acid, 2-(dihydrogen phosphate), trisodium salt	66170-10-3	>= 90 - <= 100

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

STAY-C® 50**5016285**

Version 2.1

Revision Date 07/09/2024

Date of last issue: 11/21/2022

- General advice : No hazards which require special first aid measures.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
- If swallowed : Rinse mouth with water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : No specific symptoms known.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water
Foam
- Specific hazards during fire-fighting : None known.
- Further information : Consider dust explosion hazard.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Avoid dust formation.
- Environmental precautions : Try to prevent the material from entering drains or water courses.
- Methods and materials for containment and cleaning up : Sweep up and shovel.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.
Take precautionary measures against static discharges.

STAY-C® 50**5016285**

Version 2.1

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- Advice on safe handling : For personal protection see section 8.
- Conditions for safe storage : To maintain product quality, do not store in heat or direct sunlight.
Keep container tightly closed and dry.
- Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
L-Ascorbic acid, 2-(dihydrogen phosphate), trisodium salt	66170-10-3	TWA	26 mg/m ³	DSM Internal Limit

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
In case of high dust concentration use a dust mask applicable to local conditions.
- Hand protection
Remarks : Glove material: for example nitrile rubber
- Eye protection : Safety glasses
- Skin and body protection : Lightweight protective clothing
- Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

- Appearance : powder
- Colour : white - off-white
- Odour : odourless
- Odour Threshold : No information available.
- pH : 9 - 10 (3%)
(as aqueous solution)
- Melting point/range : > 200 °C
Could not be determined due to decomposition.
- Boiling point/boiling range : not determined
- Flash point : Not applicable
- Flammability (solid, gas) : Not expected to form explosive dust-air mixtures.
- Vapour pressure : < 0.001 hPa (20 °C)
< 0.001 hPa (130 °C)
- Relative vapour density : Not applicable

STAY-C® 50**5016285**

Version 2.1

Revision Date 07/09/2024

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Density	: 1.94 g/cm ³ (20 °C)
Water solubility	: 789 g/l (20 °C; Tested according to Annex V of Directive 67/548/EEC.)
Partition coefficient: n-octanol/water	: log Pow < -4 (25 °C; Tested according to Annex V of Directive 67/548/EEC.)
Auto-ignition temperature	: 238 °C (1,013 hPa,) (Tested according to Annex V of Directive 67/548/EEC.)
Thermal decomposition	: Decomposes on heating. Potential for exothermic hazard
Explosive properties	: Not explosive
Oxidizing properties	: Not oxidizing

Other information

Combustibility index for deposited dust	: 1 (ca. 20 °C)
Dust explosion class	: The sample could not be ignited under test conditions (Hartmann tube). (Product sample)
Minimum ignition temperature of a dust/air mix	: >= 600 °C determined in the BAM oven
Molecular weight	: 358.08 g/mol
Bulk density	: 490 kg/m ³
Impact sensitivity	: Not impact sensitive.
Surface tension	: 69.5 mN/m (1 g/l, 20 °C, Tested according to Annex V of Directive 67/548/EEC.)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No hazards to be specially mentioned.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Dust may form explosive mixture in air.
Conditions to avoid	: Heat
Incompatible materials	: Strong acids and strong bases Strong oxidizing agents
Hazardous decomposition products	: No decomposition if used as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD ₅₀ (Rat): > 5,000 mg/kg (OECD Test Guideline 401)
Acute dermal toxicity	: LD ₅₀ (Rat): > 2,000 mg/kg

STAY-C® 50**5016285**

Version 2.1

Revision Date 07/09/2024

Date of last issue: 11/21/2022

(OECD Test Guideline 402)

Skin irritation	: No skin irritation (Rabbit, OECD Test Guideline 404)
Eye irritation	: No eye irritation (Rabbit, OECD Test Guideline 405) : Dust contact with the eyes can lead to mechanical irritation.
Sensitisation	: Did not cause sensitization. (Guinea pig, OECD Test Guideline 406) : no photoallergenic skin reaction (Guinea pig) Test performed using a similar product.
Genotoxicity in vitro	: not mutagenic (Various test systems)
Carcinogenicity	: No indication for carcinogenicity known.
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.
Teratogenicity	: No indication for teratogenicity known.
STOT - single exposure (Acute exposure)	: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	: NOAEL (Oral, Rat) : 90 mg/kg bw/d Subacute toxicity study (28 days) (OECD Test Guideline 407)
Aspiration toxicity	: No aspiration toxicity classification

SECTION 12. ECOLOGICAL INFORMATION**Toxicity**

Toxicity to fish	: Danio rerio (zebra fish) LC50 (96 h) 5,856 mg/l (nominal concentration) (OECD Test Guideline 203)
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STAY-C® 50**5016285**

Version 2.1

Revision Date 07/09/2024

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- Toxicity to daphnia and other aquatic invertebrates : Daphnia magna (Water flea)
EC50 (48 h) > 100 mg/l
(nominal concentration)
(Directive 67/548/EEC, Annex V, C.2.)
- Toxicity to algae : ErC50 (72 h) > 100 mg/l
(nominal concentration)
(Directive 67/548/EEC, Annex V, C.3.)
: NOEC (72 h) 3.13 mg/l
(nominal concentration)
- Toxicity to bacteria : Pseudomonas putida
EC50 (16 h) 7,700 mg/l
(nominal concentration)

Persistence and degradability

- Biodegradability : Not readily biodegradable.
≤ 30 % (28 d)
(OECD Test Guideline 301F)
- : Well inherently biodegradable.
96 % (3 d)
- Stability in water : DT50: > 1,014 h (50 °C, pH 7)

Bioaccumulative potential

- Partition coefficient: n-octanol/water : log Pow < -4 (25 °C ; Tested according to Annex V of Directive 67/548/EEC.)

Mobility in soil

- Distribution among environmental compartments : No data available
- Surface tension : 69.5 mN/m (1 g/l, 20 °C, Tested according to Annex V of Directive 67/548/EEC.)

Other adverse effects**Product:**

- Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
- Additional ecological information : There is no data available for this product.

STAY-C® 50**5016285**

Version 2.1

Revision Date 07/09/2024

Date of last issue: 11/21/2022

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : Offer surplus and non-recyclable solutions to a licensed disposal company.
- User must determine if any wastes generated exhibit hazardous characteristics as per 40 CFR Part 261 or other national / local legislation.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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 Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

Special precautions for user

- Remarks : Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

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** : No SARA Hazards

- 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.

STAY-C® 50**5016285**

Version 2.1

Revision Date 07/09/2024

Date of last issue: 11/21/2022

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

L-Ascorbic acid, 2-(dihydrogen phosphate), trisodium salt 66170-10-3

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

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

TCSI	: On the inventory, or in compliance with the inventory
TSCA	: Product contains substance(s) not listed on TSCA inventory.
AIIC	: All components are listed on the inventory, regulatory obligations/restrictions apply
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL. L-Ascorbic acid, 2-(dihydrogen phosphate), trisodium salt
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: On the inventory, or in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory

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Version 2.1

Revision Date 07/09/2024

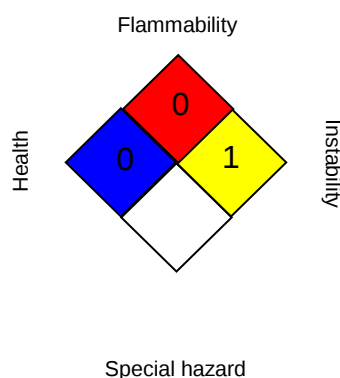
Date of last issue: 11/21/2022

TECI : Not in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION**Further information****NFPA 704:****HMIS® IV:**

HEALTH	/	0
FLAMMABILITY		0
PHYSICAL HAZARD		1

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 Harmonized 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 Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; 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 - Organization 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

STAY-C® 50**5016285**

Version 2.1

Revision Date 07/09/2024

Date of last issue: 11/21/2022

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

ACGIH = American Conference of Governmental Industrial Hygienists. CFR = Code of Federal Regulations. EPA = Environmental Protection Agency. NIOSH = National Institute of Occupational Safety and Health. OSHA = Occupational Safety and Health Administration. STEL = Short term exposure limit. TLV = Threshold Limit Value. TLV-C = Ceiling Limit Value. TWA = Time Weighted Average.

Revision Date : 07/09/2024

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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