

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Arbutin (Alpha)
Commercial Name Not available.

Product Use Ingredient for personal care products

Restrictions On Use Not available

Product Code 30-4187

Company PCCA In case of emergency contact:

9901 South Wilcrest Houston, TX 77099 Phone: 1-800-331-2498 Fax: 1-800-874-5760 CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Acute Toxicity (Oral) Category 4

CFR 1910.1200

Signal Word WARNING

Hazard Statement(s) May form combusitible dust concentrations in air. Harmful if swallowed.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product **Response** IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.Rinse mouth.

Storage Not available

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

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance

Components alpha-D-glucopyranoside, 4-hydroxyphenyl

% By Weight 90-100

CAS# 84380-01-8

Molecular Weight Not available.

Chemical Formula C12H16O7

Synonym(s) Not available.

Mixtures

Name CAS# % by Weight TLV/PEL LC50/LD50

Not available Not available

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Section 4: First-Aid Measures

Inhalation Move to fresh air. Consult a physician after significant exposure

Skin ContactTake off contaminated clothing and shoes immedately. Wash off with soap and plenty of water. If symptoms

persist, call a physician.

Eye Contact Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open

while rinsing. If eye irritation persists, consult a specialist.

Ingestion Clean mouth with water and drink plenty of water afterwards. Do not give milk or alcoholic beverages. Never

give anything by mouth to an unconscious person. Obtain medical attention.

Symptoms/Effects

Acute No specific symptoms known

Delayed No specific symptoms known

Immediate Medical Attention

Treat symptomatically.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Water. Foam. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Consider dust explosion hazard.

Unsuitable Extinguishing Media

Not available

Products of Combustion

Not available.

Firefighters Special Equipment and Precautions

Specific hazards during fire-fighting: Do not allow run-off from fire fighting to enter drains or water courses. 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. Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust. Environmental precautions: Do not flush into surface water or sanitary sewer system. Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust

Section 7: Handling and Storage

Advice on safe handling: Avoid formation of respirable particles. Avoid exceeding the given occupational exposure limits (see section 8). For personal rotection see section 8. Dispose of rinse water in accordance with local and national regulations. Smoking, eating and drinking should be prohibited in the application area. 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. Conditions for safe storage: Protect against light Storage temperature: 59 - 77 °F (15 - 25 °C)

Section 8: Exposure Controls/Personal Protection

Exposure Limits
Engineering Controls
Personal Protection

Contains no substances with occupational exposure limit values

Not available.

Respiratory protection: In the case of dust or aerosol formation use respirator with an approved filter. Hand protection: Glove material: for example nitrile rubber. Eye protection: Safety glasses with side-shields Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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pН

Vapor Pressure

Evaporation Rate

Vapor Density

Section 9: Physical and Chemical Properties

White/Off-white powder. **Appearance**

Odorless. Odor **Odor Threshold** Not available

201 °C **Melting Point** Freezing Point Not available 284.4 °C **Boiling Point/Range**

Decomposes on heating. Pot **Decomposition temperature Viscosity**

n- log Pow -1.69 (ca. 21 °C;

Partition Coefficient: n-octanol/water

Not applicable Flash Point **Flammability**

Not highly flammable

Autoignition temperature

Not available

Not available

Not available.

Not available.

Not available

0.057 Pa at 25 °C

Flammability or Explosive Limits:

Not available

Not available Upper

Solubility(ies) Other

Soluble in water= 151 g/l (ca. 20 °C; Tested according to Directive 92169/EEC.)

Combustibility index for deposited dust: 5 (23 °C) Dust explosion class: St(H)2 (Milled sample, Median value of the tested sample 0.040 mm, Loss on drying 0.6 %; The value was determined in the modified Hartmann tube.) Minimum ignition energy: 3 - 10 mJ (Milled sample, Median value of the tested sample 0.040 mm, Loss on drying 0.6 %, EN 13821) The Minimum ignition energy (MIE) of a dust/air mix depends on the particle size the water content and the temperature of the dust. The finer and the dryer the dust the lower the MIE. General remark: The indicated dust explosion characteristics are only valid for this product and are sensitive to the sample's parameters. Powder volume resistivity: 4E+11 Ohmm (Product sample, Median value of the tested sample 0.077 mm, Loss on drying 0.6 %) Minimum

Lower

ignition temperature of a dust/air mix: 440 °C (Median value of the tested sample 0.077 mm) determined in the BAM oven Molecular weight: 272.25 g/mol

Section 10: Stability and Reactivity

No hazards to be specially mentioned Reactivity

Stable under recommended storage conditions. **Chemical Stability**

Hazardous Polymerization Hazardous decomposition products: No decomposition if used as directed.

Heat Conditions to Avoid

Not available. **Incompatible Materials**

No decompostion if used as directed **Hazardous Decomposition Products**

Section 11: Toxicological Information

RTECS Not available

Acute Toxicity

Acute oral toxicity: LD50 > 300 - < 500 mg/kg [Rat] Eye irritation: slight irritation (Rabbit, OECD Test Guideline 405) STOT - single exposure: The substance or mixture is not classified as specific target organ toxicant, single exposure. STOT - repeated exposure: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Skin Corrosion/Irritation

No irritation (rabbit) Prolonged skin contact may cause skin irritation, mild irritation (guinea pig)

Serious Eye Damage/Irritation

slight irritation(quinea pig)

Respiratory or Skin Sensitization

Not available.

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Germ Cell Mutagenicity

No genotoxic (mouse, mutagenicity (micronucleus test))

Carcinogenicity

No indication for carcinogenicity known

Reproductive Toxicity

No indication for adverse effects on fertility known

Routes of Entry

Not available.

Symptoms Related to Exposure

No specific symptoms known

Potential Health Effects

Ingestion:harmful if swallowed.Harmful or fatal if swallowed

Target Organ(s) Not available

Section 12: Ecological Information

Ecotoxicity

Not available.

Persistance and Degradability

Readily biodegradable. 81.15 % (28 d) (OECD Test Guideline 301 F)

Bioaccumulative Potential

Partition coefficient: n-octanol/water: log Pow -1.69 (ca. 21 °C; Tested according to Directive 92/69/EEC.)

Mobility in Soil

Not available.

Other Adverse Effects

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.

Section 13: Disposal Considerations

Waste Disposal

Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. 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.

Disposal of Container

Contaminated packaging: Dispose of as unused product. Do not re-use empty containers.

Other Considerations

Not available

Section 14: Transport Information

DOT Classification

Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information

Regulations

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TSCA list: Not relevant EPCRA - Emergency Planning and Community Right-to-Know Act 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 311/312 Hazards: Acute Health Hazard SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. 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. Clean Air Act This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (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 SOCMI 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 Massachusetts Right To Know: No components are subject to the Massachusetts Right to Know Act. Pennsylvania Right To Know alpha-D-glucopyranoside, 4-hydroxyphenyl 84380-01-8 90 - 100 % New Jersey Right To Know: alpha-D-glucopyranoside, 4-hydroxyphenyl 84380-01-8 90 - 100 % The components of this product are reported in the following inventories: TSCA: Not On TSCA Inventory : alpha-D-glucopyranoside, 4-hydroxyphenyl

Other

Not available

Section 16: Other Information

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. E -mail address: sds.nutritionalproducts @dsm.com Responsiblerissuing person Abbreviations: ACGIH = American Conference of Governmental Industrial Hygienists. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. CFR = Code of Federal Regulations. CPR = Controlled Products Regulations. DSL = Canadian Domestic Substance List. DOT = Department of Transportation. EINECS = European Inventory of New and Existing Chemical Substances. EPA = Environmental Protection Agency. HCS = Hazardous Communication Standard. HEPA = High Efficiency Particulate Air. HMIS = Hazardous Material Identification System. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IMDG = International Maritime Dangerous Good. NFPA = National Fire Protection Association. NIOSH = National Institute of Occupational Safety and Health. NJTSR = New Jersey Trade Secret Registry. NTP = National Toxicology Program. OSHA = Occupational Safety and Health Administration. SARA =

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