SAFETY DATA SHEET (SDS) DATED 22/04/2019

SECTION 1: IDENTIFICATION OF PRODUCT AND SUPPLIER

Product Name: Dehydroacetic acid & Benzyl alcohol & Aqua

Commercial Name: Cosgard Commun Usage: Preservative

Supplier: Mille Vertus, 376 9e Avenue, Weedon, QC, J0B3J0

Contact Telephone: (819) 877-2019 Contact Email: info@millevertus.ca

Emergency phone number: 1 800-463-5060 - CENTRE ANTIPOISON DU QUÉBEC

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP)

Acute Tox. 4 (Ingestion) H302 Acute Tox. 4 (Inhalation) H332

2.1.2 Directive 67/548/EEC & Directive 1999/45/EC Xn R20/22:

Harmful by inhalation and if swallowed.

2.2 Label elements According to EC 1272/2008

2.2.1 Label elements

GHS Product Identifier: Dehydroacetic acid & Benzyl alcohol & Aqua

Hazard Pictogram

Signal word(s) Warning

Hazard statement(s)

H302: Harmful if swallowed. H332: Harmful if inhaled.

Precautionary statement(s)

P260: Do not breathe fumes.

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.

2.2.2 Label elements According to Directive 1999/45/EC

Pictogram Risk Xn

Risk Phrases

R20/22: Harmful by inhalation and if swallowed.

Safety Phrases

S23: Do not breathe fumes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical

S36: Wear suitable protective clothing.

2.3 Other hazards

Inhalation of vapour may cause slight irritation of nose, throat and respiratory tract. May cause eye irritation

2.4 Additional Information

N/A

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS Inci: Dehydroacetic acid & Benzyl alcohol & Aqua

Cas: 520-46-6/771-03-9/16807-48-0/100-51-6

Einecs: 208-293-9 / 212-227-4 / 202-859-9

3.1 Substances

EC Classification No. 1272/2008

Hazardous Ingredient(s) %W/W Cas No. EC No. Hazard Statement Benzyl alcohol

Index No. 603-057-00-5 80-90 100-51-6 202-859-9 Acute Tox. 4 H302

Acute Tox. 4 H332

Dehydroacetic acid

Index No. 607-163-00-2 5-10 520-45-6 208-293-9 Acute Tox. 4 H302

EC Classification No. 67/548/EEC

Hazardous Ingredient %W/W Cas No. EC No. Classification Risk Phrases Benzyl alcohol

Index No. 603-057-00-5 80-90 100-51-6 202-859-9

R20/22: Harmful by inhalation and if swallowed

Dehydroacetic acid

Index No. 607-163-00-2 5-10 520-45-6 208-293-9 Xn

R22: Harmful if swallowed 3.3 Additional Information

For full text of R/H/P phrases see section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation

Remove persons affected to fresh air. Keep patient warm and at rest. Apply artificial respiration if necessary. If breathing is laboured, administer oxygen. Obtain medical attention if symptoms develop

Skin Contact

Remove contaminated clothing immediately and gently wash affected skin with plenty of water. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops

Eye Contact

If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention if irritation persists

Ingestion

Obtain medical attention if ingested. Wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Irritation, coughing, headache, nausea, dizziness, vomiting,

4.3 Indication of the immediate medical attention and special treatment needed

Increased difficulty in breathing. headache, dizziness Treat symptoms

SECTION 5: FIRE - FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Extinguish with foam, carbon dioxide, dry chemical or water spray.

Unsuitable Extinguishing Media Water jet

5.2 Special hazards arising from the substance or mixture

N/A

5.3 Advice for fire-fighters

In case of fire:

Evacuate area. Self-contained breathing apparatus to be worn if involved in fire. Water spray should be used to cool containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Put on protective clothing. Avoid contact with skin and eyes.

Do not breathe fumes/vapour.

Caution - spillages may be very slippery.

6.2 Environmental precautions

Do not allow to enter drains, sewers or watercourses. If substance has entered a watercourse or sewer, IMMEDIATELY advise water authority.

6.3 Methods and material for containment and cleaning up

Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a plastic container for disposal. Do not mix with other waste materials. Disposal should be in accordance with local or national legislation.

6.4 Reference to other sections

See Section: 8 (Exposure controls / PPE) & 13 (Disposal)

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe vapour or mist. Store in plastic, plastic lined or stainless steel containers

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed, in a cool, dry, well ventilated place.

Storage Temperature

5 - 40 degC

Storage Life

Two years

Incompatible materials:

Strong oxidising agents. Strong acids, iron

Other information

Keep away from heat and sunlight. Keep away from food, drinks and animal food. Take precautionary measures against static discharg

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION 8.1 Control parameters

8.1.1 Occupational Exposure Limits LTEL (8 hr TWA mg/m³)

WEL: Workplace Exposure Limit (UK HSE EH40) Not applicable

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction if dusts, fumes or vapours are likely to be evolved.

8.2.2 Personal protection equipment Eye/face protection

Safety spectacles/goggles. Minimum standard EN166.

Skin protection (Hand protection/ Other)

Butyl, PVC or fluoro-rubber gloves as appropriate for other materials and the process. Minimum standard EN374-3. Apron or other light protective clothing.

Respiratory protection

Wear suitable respiratory protective equipment if processing involves working in areas where aerosols, mists or dusts are likely to be evolved.: Full-/Half-/quarter-face masks (EN 136/140/141) with Type A filter

Other

General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and after work. Wash contaminated clothing before reuse.

8.2.3 Environmental Exposure Controls

Vapour Density (Air=1) Not applicable. Density (g/ml) 1.04 (Benzyl alcohol)

Do not allow to enter drains, sewers or watercourses

SECTION 9: PHYSICAL DATA AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties (Solution)

Appearance: Clear Liquid
Colour: Colourless to pale yellow
Odour: Faint, almond-like
Odour Threshold (ppm) Not available
pH (Value) Not applicable
Melting Point (°C) / Freezing Point (°C): - 15 degC (Benzyl alcohol)
Boiling point/boiling range (°C):
~ 100 degC (Water)
205 degC (Benzyl alcohol)
Flash Point (°C) [Closed cup] 96 degC
Evaporation rate (Butyl acetate = 1) Not applicable (Water)
Explosive limit ranges 1.3 - 15 % v/v
Vapour Pressure Not applicable (Water)

Solubility (Water) (20 degC) $\sim 1.5 \% \text{ v/v}$ Solubility (Other) Soluble in alcohols and acetone Partition Coefficient (n-Octanol/water) Log Pow -1.1 Auto Ignition Temperature (°C) 426 degC Decomposition Temperature ($^{\circ}$ C) > 200 degC Viscosity (mPa.s) 5.6 mPa.s at 25 degC (Benzyl alcohol) Explosive properties Not explosive. Oxidising properties Not oxidising SECTION 10: STABILITY & REACTIVITY 10.1 Reactivity Alcohol reactions 10.2 Chemical stability Stable under normal conditions. 10.3 Possibility of hazardous reactions None known 10.4 Conditions to avoid Temperatures > 40 degC, moisture 10.5 Incompatible materials Strong oxidising agents. Strong acids, iron 10.6 Hazardous Decomposition Product(s) None known SECTION 11: TOXICOLOGICAL INFORMATION 11.1 Information on toxicological effects 11.1.1 Substances Acute toxicity Ingestion LD50 : 1 620 mg/k (rat) (Benzyl alcohol) Inhalation (4 hrs) LC50 > 4 000 mg/l (rat) (Benzyl alcohol)Skin Contact LD50 : 2 000 mg/k (rabbit) (Benzyl alcohol) Skin corrosion/irritation Not irritating Serious eye damage/irritation May cause eye irritation Respiratory or skin sensitization Not sensitizing in human tests Mutagenicity There is no evidence of mutagenic potential. Carcinogenicity

IARC, NTP, OSHA, do not list this product or any of its ingredients as a known or suspected carcinogen. Reproductive toxicity No evidence of reproductive toxicity. STOT-single exposure Inhalation : Irritation of the respiratory tract. Coughing. STOT-repeated exposure Inhalation (28 days) NOAEL: 1072 mg/l (Benzyl alcohol) Ingestion (91 days) NOAEL : 200 mg/k/day (" ") 11.2 Other information N/A SECTION 12: ECOLOGICAL INFORMATION 12.1 Toxicity (Fish) (96hrs) LC50: 460 mg/l (Fathead minnow) (Benzyl alcohol) (Daphnia magna) (48hrs) EC50 : 230 mg/l (Benzyl alcohol) (Algae) (72hrs) EC50: 700 mg/l (Pseudokirchnerella sub.) (Benzyl alcohol) 12.2 Persistence and degradability Readily biodegradable. 12.3 Bioaccumulative potential (96 hrs) The product has no potential for bioaccumulation. 12.4 Mobility in soil This product is predicted to have high mobility in soil. 12.5 Results of PBT and vPvB assessment Not classified as PBT or vPvB. 12.6 Other adverse effects SECTION 13: DISPOSAL CONSIDERATIONS 13.1 Waste treatment methods This material and must be disposed of as hazardous waste, usually by incineration. Consult an accredited waste disposal contractor or the local authority for advice. 13.2 Additional Information N/A SECTION 14: TRANSPORT INFORMATION 14.1 Land transport (ADR/RID)

UN number

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

14.2 Sea transport (IMDG)

UN number

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous $\mathsf{Goods'}$.

14.3 Air transport (ICAO/IATA)

UN number

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1 EU regulations Authorisations and/or restrictions on use

Cosmetics Directive 76/768/EEC

15.1.2 National regulations

Cosmetic Products (Safety) Regulations 2008

15.2 Chemical Safety Assessment

No Chemical Safety Assessment (CSA) has been carried out

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Sections #1 - #16.

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The information contained in Material Safety Data Sheet is obtained from current and reliable sources. The information contained herein is true and to the best of Mille Vertus enr.

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