

ARISTOFLEX HMB

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Substance key: 000000105432
Version : 4 - 4 / USA

Revision Date: 11/30/2023
Date of printing :03/28/2024

SECTION 1. IDENTIFICATION

Identification of the company:	Clariant Corporation 500 East Morehead Street Charlotte, NC, 28202 Telephone No.: +1 704 331 7000
	Information of the substance/preparation: Product Stewardship, +1-704-331-7710 e-mail: SDS.NORAM@clariant.com
	Emergency tel. number: +1 800-424-9300 CHEMTREC

Trade name:	ARISTOFLEX HMB
Material number:	183575
Synonyms:	Product Has No Synonyms
Primary product use:	Cosmetics Thickener for emulsions
Chemical family:	A polymeric sulphonic acid, partially neutralised

SECTION 2. HAZARDS IDENTIFICATION

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

Combustible dust

GHS label elements

Signal word	: Warning
Hazard statements	: May form combustible dust concentrations in air.
Precautionary statements	: Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take precautionary measures against static discharge. P233 Keep container tightly closed.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	: Substance
Substance name	: A polymeric sulphonic acid, partially neutralised
CAS-No.	: Not Assigned

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Components

Chemical name	CAS-No.	Concentration (% w/w)
2-Methylpropan-2-ol	75-65-0	1 - 5

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- General advice : Remove/ Take off immediately all contaminated clothing.
- If inhaled : Move the victim to fresh air.
Give oxygen or artificial respiration if needed.
Get immediate medical advice/ attention.
Never give anything by mouth to an unconscious person.
- In case of skin contact : Wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Get medical attention immediately if irritation develops and persists.
- If swallowed : IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- Most important symptoms and effects, both acute and delayed : The possible symptoms known are those derived from the labelling (see section 2).
No additional symptoms are known.
- Notes to physician : None known.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray jet
Foam
- Unsuitable extinguishing media : Dry powder
Carbon dioxide (CO₂)
High volume water jet
- Specific hazards during firefighting : In case of fire hazardous decomposition products may be produced such as:
Nitrogen oxides (NO_x)
Sulphur dioxide
Ammonia
- Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

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Further information : Wear positive pressure self-contained breathing apparatus (SCBA) and full protective equipment.

Special protective equipment for firefighters : Self-contained breathing apparatus

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Avoid dust formation.
Keep away sources of ignition.
Wear suitable protective equipment.
Wearing appropriate personal protective equipment, contain spill, collect onto inert absorbent, and place in a suitable container.

Environmental precautions : Do not allow to enter drains or waterways

Methods and materials for containment and cleaning up : Pick up when dry.
Forms slippery/greasy layers with water.
Treat recovered material as described in the section "Disposal considerations".

Avoid dust formation.
Take measures to prevent the build up of electrostatic charge.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Take precautionary measures against static discharges.
Keep away from heat and sources of ignition.
Dust can form an explosive mixture in air.

Advice on safe handling : Avoid dust formation.
Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
Take measures to prevent the build up of electrostatic charge.
Store in a dry place.

Further information on storage conditions : Store in original container.
Keep container closed.

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-Methylpropan-2-ol	75-65-0	TWA	100 ppm	ACGIH
		TWA	100 ppm 300 mg/m3	NIOSH REL

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		ST	150 ppm 450 mg/m3	NIOSH REL
		TWA	100 ppm 300 mg/m3	OSHA Z-1
		TWA	100 ppm 300 mg/m3	OSHA P0
		STEL	150 ppm 450 mg/m3	OSHA P0

Engineering measures : Local ventilation recommended - mechanical ventilation may be used.

Personal protective equipment

Respiratory protection : Wear NIOSH approved particulate filtering respirator rated N, R, or P95 or 100 or equivalent in the absence of proper environmental control. Type of respirator depends on level of exposure.

Hand protection
Remarks : Butyl Rubber, PVC Or Neoprene.

Eye protection : Tightly fitting safety goggles

Skin and body protection : Protective clothing to minimize skin contact should be worn. Chemically resistant safety shoes. Wash contaminated clothing with soap and water and dry before reuse. Safety showers and eyewash stations should be provided in all areas where this material is handled.

Protective measures : Do not breathe dust.
Avoid contact with eyes.

Hygiene measures : Observe the usual precautions for handling chemicals.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Colour : white

Odour : characteristic

pH : 4 - 6 (77 °F / 25 °C)
Concentration: 1 g/l

Melting point : no data available

Boiling point : no data available

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Flash point	:	Not applicable
Flammability (solid, gas)	:	not determined
Self-ignition	:	536 °F / 280 °C
Burning number	:	3 Local combustion without spreading
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
Density	:	no data available
Solubility(ies) Water solubility	:	no data available
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	> 482 °F / > 250 °C
Viscosity Viscosity, dynamic	:	35,000 - 70,000 mPa.s (68 °F / 20 °C) Method: Brookfield solution
Viscosity, kinematic	:	Not applicable
Dust deflagration index (Kst)	:	148 m.b_/s
Dust explosion class	:	St1
Metal corrosion rate	:	< 6.25 mm/a Not corrosive to metals
Minimum ignition energy	:	200 - 300 mJ Method: DIN EN ISO 80079-20-2
Particle size	:	4 µm Method: ISO 13320-1 Median value

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Particle Size Distribution : D10 = 0.728 µm
D50 = 2.914 µm
D90 = 165.036 µm

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.
hygroscopic

Possibility of hazardous reactions : Contact with strong bases liberates ammonia.
The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

Conditions to avoid : None known.

Incompatible materials : not known

Hazardous decomposition products : When handled and stored appropriately, no dangerous decomposition products are known

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation
Eye contact
Skin contact

Acute toxicity**Product:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 423

Acute inhalation toxicity : Acute toxicity estimate: 75 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Components:**2-Methylpropan-2-ol:**

Acute oral toxicity : LD50 (Rat): 3,046 mg/kg
Remarks: Not classified due to data which are conclusive although insufficient for classification.

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Acute inhalation toxicity : LC50 (Rat, male and female): > 10000 ppm
Exposure time: 4 h
Test atmosphere: vapour
Method: OPPTS 870.1300
GLP: yes
Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Remarks: Not classified due to data which are conclusive although insufficient for classification.

Skin corrosion/irritation**Product:**

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

Components:**2-Methylpropan-2-ol:**

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation**Product:**

Species : rabbit eye
Result : No eye irritation
Method : OECD Test Guideline 405

Components:**2-Methylpropan-2-ol:**

Result : Irritating to eyes.

Respiratory or skin sensitisation**Product:**

Test Type : Skin
Method : OECD Test Guideline 406
Result : non-sensitizing

Components:**2-Methylpropan-2-ol:**

Test Type : Maximisation Test
Species : Guinea pig
Result : Not a skin sensitizer.

Assessment : Harmful if inhaled., Causes serious eye irritation.

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Germ cell mutagenicity**Product:**

Genotoxicity in vitro : Test system: Salmonella typhimurium
Method: OECD Test Guideline 471
Result: negative

Germ cell mutagenicity - Assessment : Not mutagenic in Ames Test

Components:**2-Methylpropan-2-ol:**

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Result: negative

Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects

Carcinogenicity**Product:**

Carcinogenicity - Assessment : No information available.

Components:**2-Methylpropan-2-ol:**

Carcinogenicity - Assessment : The observed tumors do not appear to be relevant for men.,
Not classifiable as a human carcinogen.

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**Product:**

Reproductive toxicity - Assessment : No information available.

No information available.

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Components:**2-Methylpropan-2-ol:**

Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility. Damage to fetus unlikely if the occupational exposure limit values are not exceeded., Embryotoxicity classification not possible from current data.

STOT - single exposure**Components:****2-Methylpropan-2-ol:**

Assessment : May cause respiratory irritation.

Assessment : May cause drowsiness or dizziness.

STOT - repeated exposure**Components:****2-Methylpropan-2-ol:**

Remarks : Not classified due to data which are conclusive although insufficient for classification.

Repeated dose toxicity**Product:**

Remarks : not tested.

Components:**2-Methylpropan-2-ol:**

Repeated dose toxicity - Assessment : Harmful if inhaled., Causes serious eye irritation.

Aspiration toxicity**Components:****2-Methylpropan-2-ol:**

No aspiration toxicity classification

Experience with human exposure**Product:**

General Information : The possible symptoms known are those derived from the labelling (see section 2).

Further information**Product:**

Remarks : By analogy with a product of similar composition

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity**Product:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : Remarks: not tested.

Toxicity to algae/aquatic plants : Remarks: not tested.

Toxicity to fish (Chronic toxicity) : Remarks: not tested.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: not tested.

Toxicity to microorganisms : EC50 (Vibrio fischerii (Bacteria)): 120 mg/l
Method: ISO 11348-2

Toxicity to terrestrial organisms : Remarks: not tested.

Components:**2-Methylpropan-2-ol:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 961 mg/l
Exposure time: 96 h

LC50 (Brachydanio rerio (zebrafish)): > 856 mg/l
Exposure time: 96 h
Method: Tested according to Directive 92/69/EEC.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 933 mg/l
Exposure time: 48 h
Method: Tested according to Directive 92/69/EEC.

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 986 mg/l

NOEC (Desmodesmus subspicatus (green algae)): >= 1,000 mg/l
Exposure time: 72 h
Test Type: Cell multiplication inhibition test
Method: Tested according to Directive 92/69/EEC.

EC50 (Desmodesmus subspicatus (green algae)): > 1,000

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mg/l
Exposure time: 72 h
Test Type: Cell multiplication inhibition test
Method: Tested according to Directive 92/69/EEC.

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 332 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: no data available

Toxicity to microorganisms : EC10 (Pseudomonas putida): 6,900 mg/l
Exposure time: 16 h
Test Type: Cell multiplication inhibition test
Method: DIN 38412

Persistence and degradability**Product:**

Biodegradability : Biodegradation: 33 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Chemical Oxygen Demand (COD) : 1,174 mg/g
Method: ISO/DIS 15705

Dissolved organic carbon (DOC) : 334 mg/g
Method: DIN/EN 1484

Components:**2-Methylpropan-2-ol:**

Biodegradability : Result: Inherently biodegradable.
Biodegradation: 66 %
Exposure time: 56 d

Bioaccumulative potential**Product:**

Bioaccumulation : Remarks: not tested.

Components:**2-Methylpropan-2-ol:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Mobility in soil**Product:**

Distribution among environmental compartments : Remarks: no data available

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Components:**2-Methylpropan-2-ol:**

Distribution among environmental compartments : Remarks: Highly mobile in soils
The product evaporates from soil.

Other adverse effects**Product:**

Environmental fate and pathways : Remarks: no data available

Additional ecological information : By analogy with a product of similar composition

Components:**2-Methylpropan-2-ol:**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

RCRA - Resource Conservation and Recovery Act : This product, if discarded as sold, is not a Federal RCRA hazardous waste.

Waste Code : NONE

Waste from residues : Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

Contaminated packaging : Packaging that cannot be cleaned should be disposed of as product waste

SECTION 14. TRANSPORT INFORMATION

DOT not restricted

IATA not restricted

IMDG not restricted

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

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

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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 : Combustible dust

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

2-Methylpropan- 2-ol	75-65-0	1 - 5 %
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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

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

TSCA : This product is not listed on the TSCA Inventory. It is to be used as a cosmetic ingredient only. Any other use will subject the user to penalties under the Toxic Substances Control Act and the regulations issued thereunder.

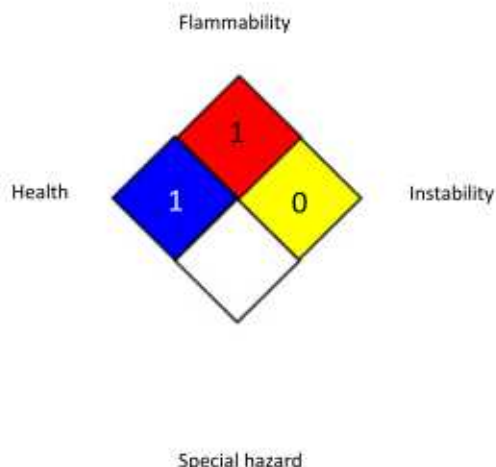
SECTION 16. OTHER INFORMATION**Further information**

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NFPA 704:**Full text of other abbreviations**

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA P0	:	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA P0 / TWA	:	8-hour time weighted average
OSHA P0 / STEL	:	Short-term exposure limit
OSHA Z-1 / TWA	:	8-hour time weighted average

AIIIC - 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

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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; (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

Warning

This product is not listed on the TSCA Inventory. It is to be used as a cosmetic ingredient only. Any other use will subject the user to penalties under the Toxic Substances Control Act and the regulations issued thereunder.

For additional information, contact Product Stewardship.

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