

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2020

Reviewed on 05/12/2020

1 Identification

- **Product identifier**
- **Trade name: BioActivate FB**
- **Application of the substance / the mixture** Antimicrobial and contamination-repellant coating product.
- **Uses advised against**
 - Any use involving significant release of dust, vapour or mist in the breathing zone of workers where they are exposed without suitable respiratory protective equipment (RPE).
 - Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).
 - Processes involving extreme heat use advised against.
 - Not for end use in this form or concentration.
 - The product is intended exclusively for industrial and professional use.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 - Coval Group
 - 12705 South Kirkwood Rd., 100
 - Stafford, TX 77477
 - Tel: +1 281 566 4277 (USA)
 - email contact: sales@coval-group.com
- **Information department:** Product safety department.
- **Emergency telephone number:** Tel: +1 281 566 4277 (USA)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

- **Label elements**
- **GHS label elements**
 - The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS07
- **Signal word** Warning
- **Hazard-determining components of labeling:**
 - Poly (1-hexamethylenebiguanide hydrochloride)
- **Hazard statements**
 - Harmful if inhaled.
- **Precautionary statements**
 - Avoid breathing dust/fume/gas/mist/vapors/spray
 - Use only outdoors or in a well-ventilated area.
 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 - Call a poison center/doctor if you feel unwell.
- **Information pertaining to particular dangers for man and environment:**
 - Please note that the hazard classification shown above applies only to the undiluted product as supplied. Once diluted, as directed, prior to use the resulting mixture will not meet the criteria as hazardous to health or to the environment.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
 Fire = 1
 Reactivity = 0

(Contd. on page 2)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2020

Reviewed on 05/12/2020

Trade name: BioActivate FB

(Contd. of page 1)

· HMIS-ratings (scale 0 - 4)

HEALTH	1	Health = 1
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description
- Additional information: A blend of halogenated polymers and biocide with multifunctional additives.

· Dangerous components:

27083-27-8	Poly (1-hexamethylenebiguanide hydrochloride)	≤2.5%
------------	---	-------

4 First-aid measures

- Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
 - Check for and remove any contact lenses.
 - Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
 - Rinse out mouth and then drink plenty of water.
 - Do not induce vomiting; immediately call for medical help.
 - If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
- Information for doctor: Treat symptomatically and supportively.
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
 - No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture
 - Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- Protective equipment:
 - Do not inhale explosion gases or combustion gases.
 - Wear self-contained respiratory protective device.
 - Wear fully protective suit.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
 - Ensure adequate ventilation
 - Wear protective equipment. Keep unprotected persons away.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2020

Reviewed on 05/12/2020

Trade name: BioActivate FB

(Contd. of page 2)

- **Environmental precautions:**
 - Do not allow to penetrate the ground/soil.
 - Do not allow product to reach sewage system or any water course in the undiluted form.
- **Methods and material for containment and cleaning up:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-1:
None of the ingredients is listed.
· PAC-2:
None of the ingredients is listed.
· PAC-3:
None of the ingredients is listed.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 - Prevent formation of aerosols.
 - Ensure good ventilation/exhaustion at the workplace.
 - Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.
 - The product must only be handled by authorised, trained and experienced professionals under strictly controlled conditions.
 - Contains organically bound fluorine.. A significant hazard associated with this product is the inhalation of thermal decomposition products. Contamination of tobacco products **MUST** be avoided.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:**
 - Store away from foodstuffs.
 - Store away from oxidizing agents.
- **Further information about storage conditions:**
 - Store in a banded area.
 - Store in cool, dry conditions in well sealed receptacles.
 - Protect from heat and direct sunlight.
 - Store under lock and key and out of the reach of children.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - Keep away from foodstuffs, beverages and feed.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2020

Reviewed on 05/12/2020

Trade name: BioActivate FB

(Contd. of page 3)

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Do not eat or drink while working.

A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Safety glasses

Goggles recommended during refilling.

· **Body protection:**

Impervious protective clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Fluid
Color:	Light yellow
Odor:	Mild
Odor threshold:	Not determined.

· **pH-value:** ~7

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	99 °C (210.2 °F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower:	Not determined.
---------------	-----------------

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2020

Reviewed on 05/12/2020

Trade name: BioActivate FB

(Contd. of page 4)

Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	1.04 g/cm ³ (8.6788 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
· Other information	NOTE: The physical data presented above are typical values and should not be construed as a specification.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Contains organically bound fluorine.. A significant hazard associated with this product is the inhalation of thermal decomposition products.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Strong oxidising agents.
- **Hazardous decomposition products:**
Hydrogen fluoride
Nitrogen oxides (NOx)
Hydrogen chloride (HCl)
Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.
- **NTP (National Toxicology Program)**
None of the ingredients is listed.

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2020

Reviewed on 05/12/2020

Trade name: BioActivate FB

(Contd. of page 5)

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** The organic portion of the product is biodegradable.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** Product is not expected to bioaccumulate.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Recommended Hierarchy of Controls:
 - Minimise waste;
 - Reuse if not contaminated;
 - Recycle, if possible; or
 - Safe disposal (if all else fails).
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Contact waste processors for recycling information.
Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Container remains hazardous when empty. Continue to observe all precautions.
Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.
Do not mix with other waste streams.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|----------------------------------|----------------|
| · UN-Number | |
| · DOT | not regulated |
| · ADR, IMDG, IATA | UN3082 |
| · UN proper shipping name | |
| · DOT | not applicable |

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2020

Reviewed on 05/12/2020

Trade name: BioActivate FB

(Contd. of page 6)

<ul style="list-style-type: none"> · ADR · IMDG · IATA 	<p>3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Poly (1-hexamethylenebiguanide hydrochloride)</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Poly (1-hexamethylenebiguanide hydrochloride), MARINE POLLUTANT</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Poly (1-hexamethylenebiguanide hydrochloride)</p>
--	--

<ul style="list-style-type: none"> · Transport hazard class(es) · DOT · Class 	<p>not applicable</p>
---	-----------------------

- **ADR, IMDG, IATA**



<ul style="list-style-type: none"> · Class · Label 	<p>9 Miscellaneous dangerous substances and articles</p> <p>9</p>
--	---

<ul style="list-style-type: none"> · Packing group · DOT · ADR, IMDG, IATA 	<p>not applicable</p> <p>III</p>
--	----------------------------------

<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA): 	<p>Symbol (fish and tree)</p> <p>Symbol (fish and tree)</p> <p>Symbol (fish and tree)</p>
--	---

<ul style="list-style-type: none"> · Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category 	<p>Warning: Miscellaneous dangerous substances and articles</p> <p>90</p> <p>F-A,S-F</p> <p>A</p>
--	---

<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	<p>Not applicable.</p>
--	------------------------

- **Transport/Additional information:**

<ul style="list-style-type: none"> · ADR · Excepted quantities (EQ) 	<p>Code: E1</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 1000 ml</p>
---	---

<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	<p>5L</p> <p>Code: E1</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 1000 ml</p>
--	---

<ul style="list-style-type: none"> · UN "Model Regulation": 	<p>UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLY (1-HEXAMETHYLENEBIGUANIDE HYDROCHLORIDE), 9, III</p>
---	---

US

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2020

Reviewed on 05/12/2020

Trade name: BioActivate FB

(Contd. of page 7)

15 Regulatory information

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

- Sara

- **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

None of the ingredients is listed.

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms GHS07**

- **Signal word** Warning

- **Hazard-determining components of labeling:**

Poly (1-hexamethylenebiguanide hydrochloride

- **Hazard statements**

Harmful if inhaled.

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor if you feel unwell.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 03/30/2020 / 05/12/2020

(Contd. on page 9)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/12/2020

Reviewed on 05/12/2020

Trade name: BioActivate FB

(Contd. of page 8)

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Tox. 4: Acute toxicity – Category 4

US