

Safety Data Sheet

VAULT HP ENHANCER

Revision date : 2017/10/05
Version: 2.0

Page: 1/9
(30590635/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

VAULT HP ENHANCER

Recommended use of the chemical and restriction on use

Recommended use*: adjuvant

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

Safety Data Sheet

VAULT HP ENHANCER

Revision date : 2017/10/05
Version: 2.0

Page: 2/9
(30590635/SDS_GEN_US/EN)

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

| <u>CAS Number</u> | <u>Weight %</u> | <u>Chemical name</u> |
|-------------------|-----------------|-----------------------------------|
| 57-50-1 | 25.0 - 50.0% | Sucrose |
| 7758-11-4 | 1.0 - 3.0% | Phosphoric acid, dipotassium salt |
| 8042-47-5 | 15.0 - 25.0% | White mineral oil (petroleum) |
| 8012-95-1 | 15.0 - 30.0% | Paraffin oils |
| 2634-33-5 | < 0.1% | 1,2-benzisothiazol-3(2H)-one |

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Rinse mouth and then drink plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam, carbon dioxide

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

Safety Data Sheet

VAULT HP ENHANCER

Revision date : 2017/10/05
Version: 2.0

Page: 3/9
(30590635/SDS_GEN_US/EN)

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and Storage

Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

| | | |
|---------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sucrose | OSHA PEL | PEL 15 mg/m ³ Total dust ; PEL 5 mg/m ³ Respirable fraction ; TWA value 15 mg/m ³ Total dust ; TWA value 5 mg/m ³ Respirable fraction ; |
| | ACGIH TLV | TWA value 10 mg/m ³ ; |

Safety Data Sheet

VAULT HP ENHANCER

Revision date : 2017/10/05
Version: 2.0

Page: 4/9
(30590635/SDS_GEN_US/EN)

| | | |
|-------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Paraffin oils | OSHA PEL | PEL 5 mg/m3 Mist ; TWA value 5 mg/m3 Mist ; |
| | ACGIH TLV | ; ; Included in the regulation, but with no data values - See the regulation for further details ; ; Exposure by all routes should be carefully controlled to levels as low as possible. TWA value 5 mg/m3 Inhalable fraction ; |
| White mineral oil (petroleum) | OSHA PEL | PEL 5 mg/m3 Mist ; TWA value 5 mg/m3 Mist ; |
| | ACGIH TLV | ; ; TWA value 5 mg/m3 Inhalable fraction ; |

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

| | |
|----------------------|-------------------------------------------------------|
| Form: | liquid |
| Odour: | odourless |
| Odour threshold: | not applicable, odour not perceivable |
| Colour: | product specific |
| pH value: | approx. 7 - 9.5 (20 °C) |
| Melting temperature: | approx. 0 °C Information applies to the solvent. |
| boiling temperature: | approx. 100 °C Information applies to the solvent. |
| Flash point: | > 100 °C |
| Flammability: | not applicable |

Safety Data Sheet

VAULT HP ENHANCER

Revision date : 2017/10/05
Version: 2.0

Page: 5/9
(30590635/SDS_GEN_US/EN)

| | |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lower explosion limit: | As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use. |
| Upper explosion limit: | As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use. |
| Autoignition: | Based on the water content the product does not ignite. |
| Vapour pressure: | approx. 23.4 hPa (20 °C) |
| Density: | Information applies to the solvent. approx. 1.0 - 1.3 g/cm ³ (20 °C) |
| Vapour density: | not applicable |
| Partitioning coefficient n-octanol/water (log Pow): | not applicable |
| Thermal decomposition: | No decomposition if stored and handled as prescribed/indicated. |
| Viscosity, kinematic: | Forms a viscous solution. |
| Solubility in water: | dispersible |
| Evaporation rate: | not applicable |
| Other Information: | If necessary, information on other physical and chemical parameters is indicated in this section. |

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

Safety Data Sheet

VAULT HP ENHANCER

Revision date : 2017/10/05
Version: 2.0

Page: 6/9
(30590635/SDS_GEN_US/EN)

No decomposition if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from the properties of the individual components.

Oral

Type of value: ATE
Value: > 5,000 mg/kg

Inhalation

Type of value: ATE
Value: > 20.0000 mg/l
Determined for vapor

Type of value: ATE
Value: > 5.0000 mg/l
Determined for mist

Dermal

Type of value: ATE
Value: > 5,000 mg/kg

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organotoxicity was observed after repeated administration to animals.

Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Safety Data Sheet

VAULT HP ENHANCER

Revision date : 2017/10/05
Version: 2.0

Page: 7/9
(30590635/SDS_GEN_US/EN)

Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Other Information

Misuse can be harmful to health.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

No data available.

Aquatic invertebrates

No data available.

Aquatic plants

No data available.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

The product has not been tested. The statement has been derived from the properties of the individual components. Moderately/partially eliminated from water.

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested.

Bioaccumulation potential

Significant accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

Adsorption to solid soil phase is expected.

Safety Data Sheet

VAULT HP ENHANCER

Revision date : 2017/10/05
Version: 2.0

Page: 8/9
(30590635/SDS_GEN_US/EN)

The product has not been tested. The statement has been derived from the properties of the individual components.

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Must be disposed of or incinerated in accordance with local regulations.

Container disposal:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

Fertilizer TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

State RTK

PA

CAS Number

57-50-1

8012-95-1

Chemical name

Sucrose

Paraffin oils

MA

57-50-1

8012-95-1

Sucrose

Paraffin oils

NJ

8012-95-1

Paraffin oils

Safety Data Sheet

VAULT HP ENHANCER

Revision date : 2017/10/05
Version: 2.0

Page: 9/9
(30590635/SDS_GEN_US/EN)

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2017/10/05

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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