

# Vacuum Pumps and Systems

Busch, Inc. 516 Viking Drive, Virginia Beach, Virginia 23452



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## MATERIAL SAFETY DATA SHEET

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### SECTION I - PRODUCT AND COMPANY IDENTIFICATION

Product/Material:	Busch R-610 High Vacuum Oil	Emergency Telephone No.
Manufacturer:	Busch, Inc.	Chemtrec: (800) 424-9300
Address:	516 Viking Drive Virginia Beach, VA 23452	Non-emergency Telephone No. Busch, Inc. (757) 463-7800
Trade Name and Synonyms:	Busch High Vacuum Oil, Busch Part No. 0831.909.565 (5 liter) Busch Part No. 0831.909.566 (20 liter).	

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### SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:	Highly refined mineral oils and additives.
Dangerous Components:	On the basis of available information, the components of this preparation are not expected to impart hazardous properties to this product.

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### SECTION III - HAZARDS IDENTIFICATION

Human Health Hazards:	Prolonged or repeated exposure may give rise to dermatitis. No specific hazards under normal use conditions.
Safety Hazards:	Contains mineral oil for which an exposure limit for oil mist applies.
Environmental Hazards:	Avoid spillage. Not readily biodegradable.

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### SECTION IV - FIRST AID MEASURES

Inhalation:	Remove to fresh air. If rapid recovery does not occur, obtain medical attention.
Skin Contact:	Remove contaminated clothing and wash affected skin with soap and water. If high pressure injection injuries occur, obtain medical attention immediately.
Eye Contact:	Rinse immediately with plenty of water for at least 10 minutes and seek medical advice.
Ingestion:	Do not induce vomiting. If rapid recovery does not occur, obtain medical attention.
Advice to Physicians:	Treat symptomatically.

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## SECTION V - FIREFIGHTING MEASURES

Extinguishing Media: Foam, dry chemical powder, carbon dioxide, sand, or earth. Do not use water in a jet.

Special Firefighting Hazards: Combustion is likely to give rise to a complex mixture of gases and airborne particulates, including carbon monoxide, oxides of sulfur, and unidentified organic and inorganic compounds.

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## SECTION VI - ACCIDENTAL RELEASE MEASURE

Personal Precautions: Ventilate contaminated area thoroughly. Minimize contact with skin.

Environmental Precautions: Prevent further leakage or spillage and prevent from entering drains. Prevent from spreading or entering into drains, ditches, or rivers by using sand, earth, or other appropriate barriers.

Clean-up Measures: Absorb or contain liquid with sand, earth, or spill control material. Shovel into a suitable, clearly marked container for disposal or reclamation in accordance with local regulations.

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## SECTION VII - HANDLING AND STORAGE

Handling: When using, do not eat or drink. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Prevent spillages. Avoid direct sunlight, heat sources, and strong oxidizing agents.

Storage: Store in mild steel or high density polyethylene for containers. Do not store in open or unlabeled containers. Store away from strong oxidizing agents or combustible material.

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## SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTIVE EQUIPMENT

Ventilation: No special requirements under ordinary conditions of use and with adequate ventilation.

Exposure Limits:

Component name	Limit type	Value/unit	Other Information
Oil mist:	8-h TWA	5 mg/m <sup>3</sup>	ACGIH
15-min STEL:	10 mg/m <sup>3</sup>	ACGIH	

Respiratory Protection: Not normally required. If oil mist cannot be controlled, a respirator fitted with an organic vapor cartridge combined with a particulate pre-filter should be used.

Hand Protection: PVC or nitril rubber gloves, if splashes are likely to occur, and if applicable.

Eye Protection: Safety glasses.

Skin Protection: Minimize all forms of skin contact.  
Hygiene Measure: Don't keep oily rags in your pockets. Wash your hands before eating or drinking.

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#### SECTION IX - CHEMICAL AND PHYSICAL PROPERTIES

Physical Form: Liquid  
Color: Clear  
Pour Point (DIN ISO 3016): -15°C (5°F)  
Flash Point (DIN ISO 2592): 264°C (507°F)  
Vapor Pressure (20°C): <0.01 hPa  
Density (15°C) (DIN 51 757 D): 870 kg/m<sup>3</sup>  
Solubility in Water (20°C)  
n-Octanol/Water Partition Coefficient: Not determined  
Kin. Visc. (40°C)  
(DIN 51 562, T.1): 94 mm<sup>2</sup>/s

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#### SECTION X - STABILITY AND REACTIVITY

Stability: Stable under normal use conditions.  
Materials to Avoid: Strong oxidizing agents.  
Hazard. Decomposition Products: Hazardous decomposition products are not expected to form during normal storage.

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#### SECTION XI - TOXICOLOGICAL INFORMATION

Acute Toxicity (oral) LD 50 expected to be >2000 mg/kg.  
Specific Symptomatic Results: Not available.  
Skin Irritation/sensitation: Not expected to be a skin sensitizer.  
Eye Irritation: Expected to be slightly irritating.  
Prolonged/Repeated Contact: Prolonged/repeated contact may cause defatting of the skin that can lead to dermatitis and may make the skin more susceptible to irritation and penetration by other materials.  
Carcinogenicity: Product is based on mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Other components are not known to be associated with carcinogenic effects.  
Other Information: Information given is based on a knowledge of the toxicology of similar products.

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## SECTION XII - ECOLOGICAL INFORMATION

Persistence/Degradability: Information given is based on data on the components and the ecotoxicology of similar products. Not readily biodegradable.

Mobility: Floats on water. Liquid under most environmental conditions. If it enters soil, it will be absorbed by soil particles and will not be mobile. Product has the potential to bioaccumulate.

Ecotoxicity: Product is expected to be practically non-toxic to aquatic organisms, LC/EC50 >100 mg/L.

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## SECTION XIII - DISPOSAL CONSIDERATIONS

Product Precautions: Dispose to licensed disposal contractor.  
Waste Disposal No. (EU): 13 02 02

Container Disposal: Drain container thoroughly. Dispose to licensed disposal contractor.  
Cleaning should be by disposal contractor.

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## SECTION XIV - TRANSPORT INFORMATION

Not dangerous for conveyance under UN, IMO, ADR/RID, and IATA/ICAO codes.

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## SECTION XV - REGULATORY INFORMATION

EC Classification: Not classified as dangerous under EC criteria (incl. Directive 98/98/EC (25.ATP)).

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## SECTION XVI - OTHER INFORMATION

Additional Information: Concawe Report 5/87 Health Aspects of Lubricants.

This information is based on our current knowledge and is intended to describe the product for the purpose of health, safety, and environmental requirements only. It should not, therefore, be construed as guaranteeing any specific property of the product.