

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/15/2020

Reviewed on 09/15/2020

1 Identification**- Product identifier**

- **Trade name:** Vibra-TITE
- **Synonyms:** Isopropyl Alcohol, 99%, USP
- **Part number:** VT614

- Details of the supplier of the safety data sheet**- Manufacturer/Supplier:**

ND Industries, Inc
1000 North Crooks Road
Clawson, MI 48017
USA
Telephone: +1-248-288-0000
Email: info@ndindustries.com
Website: www.ndindustries.com

- Information department: Product Safety Department**- Emergency telephone number:**

United States: 1-800-424-9300
International: +1-703-527-3887

2 Hazard(s) identification**- Classification of the substance or mixture**

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

- Label elements

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms

GHS02 GHS07

- Signal word Danger**- Hazard-determining components of labeling:**

isopropanol

- Hazard statements

H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

- Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P280 Wear eye protection / face protection.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/15/2020

Reviewed on 09/15/2020

Trade name: Vibra-TITE

(Contd. of page 1)

| | |
|-----------|---|
| P312 | Call a poison center/doctor if you feel unwell. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P370+P378 | In case of fire: Use for extinction: CO2, powder or water spray. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |

- Other hazards**- Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:

| | | |
|--------------------------|--|-----------|
| CAS: 67-63-0 isopropanol | Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336 | 90 – 100% |
|--------------------------|--|-----------|

4 First-aid measures

- Description of first aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
 - **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:**

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **Special hazards arising from the substance or mixture** No further relevant information available.

- Advice for firefighters**- Protective equipment:**

Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Wear protective clothing.

- Environmental precautions:

Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up:

Ensure adequate ventilation.
Dispose of the collected material according to regulations.

- 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.

7 Handling and storage

- Handling:**- Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/15/2020

Reviewed on 09/15/2020

Trade name: Vibra-TITE

(Contd. of page 2)

- Conditions for safe storage, including any incompatibilities

- Storage:

- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

- 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:

CAS: 67-63-0 isopropanol

| | |
|-----|--|
| PEL | Long-term value: 980 mg/m ³ , 400 ppm |
| REL | Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm |
| TLV | Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm |
| BEI | |

- Ingredients with biological limit values:

CAS: 67-63-0 isopropanol

| | |
|-----|---|
| BEI | 40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific) |
|-----|---|

- 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.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

- 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.

- Protection of hands:



Protective gloves

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.
Nitrile rubber, NBR

- 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.

- Body protection: Protective work clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance:

- **Form:** Fluid
- **Color:** Clear
- **Odor:** Alcohol-like
- **Odor threshold:** Not determined.

- pH-value: Not determined.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/15/2020

Reviewed on 09/15/2020

Trade name: Vibra-TITE

(Contd. of page 3)

| | |
|---|--|
| - Change in condition | |
| - Melting point/Melting range: | -89.5 °C (-129.1 °F) |
| - Boiling point/Boiling range: | ≥ 82 °C (≥ 179.6 °F) |
| - Flash point: | > 18.3 °C (> 64.9 °F) |
| - Flammability (solid, gaseous): | Not applicable. |
| - Ignition temperature: | 425 °C (797 °F) |
| - Decomposition temperature: | Not determined. |
| - Auto igniting: | Product is not selfigniting. |
| - Danger of explosion: | Product is not explosive. However, formation of explosive air/vapor mixtures are possible. |
| - Explosion limits: | |
| - Lower: | 2 Vol % |
| - Upper: | 12 Vol % |
| - Vapor pressure at 20 °C (68 °F): | 43 hPa (32.3 mm Hg) |
| - Density at 20 °C (68 °F): | ~ 0.78928 g/cm ³ (~ 6.58654 lbs/gal) |
| - Relative density | Not determined. |
| - Vapor density | Not determined. |
| - Evaporation rate | Not determined. |
| - Solubility in / Miscibility with | |
| - Water at 20 °C (68 °F): | 1 g/l |
| - Partition coefficient (n-octanol/water): | Not determined. |
| - Viscosity: | |
| - Dynamic at 20 °C (68 °F): | 2.43 mPas |
| - Kinematic: | Not determined. |
| - Solvent content: | |
| - Organic solvents: | 98.0 % |
| - Water: | 2.0 % |
| - VOC content: | 98.01 % ~ 773.6 g/l / ~ 6.46 lb/gal |
| - Solids content: | 0.0 % |
| - Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)

| | | |
|------------|----------|-----------------|
| Inhalative | LC50/4 h | 30.6 mg/l (rat) |
|------------|----------|-----------------|

CAS: 67-63-0 isopropanol

| | | |
|------------|----------|-----------------------|
| Oral | LD50 | 5,045 mg/kg (rat) |
| Dermal | LD50 | 12,800 mg/kg (rabbit) |
| Inhalative | LC50/4 h | 30 mg/l (rat) |

- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** Irritating effect.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/15/2020

Reviewed on 09/15/2020

Trade name: Vibra-TITE

(Contd. of page 4)

- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

| | |
|--------------------------|---|
| CAS: 67-63-0 isopropanol | 3 |
|--------------------------|---|

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **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** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **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:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.
 - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

| | |
|---|---|
| - UN-Number - DOT, IMDG, IATA | UN1219 |
| - UN proper shipping name - DOT - IMDG, IATA | Isopropanol ISOPROPANOL (ISOPROPYL ALCOHOL) solution |
| - Transport hazard class(es) - DOT | |
|  | |
| - Class - Label | 3 Flammable liquids 3 |
| - IMDG, IATA | |
|  | |
| - Class - Label | 3 Flammable liquids 3 |
| - Packing group - DOT, IMDG, IATA | II |

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/15/2020

Reviewed on 09/15/2020

Trade name: Vibra-TITE

(Contd. of page 5)

| | |
|--|---|
| - Environmental hazards: | Not applicable. |
| - Special precautions for user | Warning: Flammable liquids |
| - Hazard identification number (Kemler code): | 33 |
| - EMS Number: | F-E,S-D |
| - Stowage Category | B |
| - Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| - Transport/Additional information: | |
| - DOT | |
| - Quantity limitations | On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L |
| - IMDG | |
| - Limited quantities (LQ) | 1L |
| - Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |
| - UN "Model Regulation": | UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) SOLUTION, 3, II |

15 Regulatory information

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

- Sara

- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

CAS: 67-63-0 isopropanol

- TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

- 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.

- Carcinogenic categories

- EPA (Environmental Protection Agency)

None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)

CAS: 67-63-0 isopropanol

A4

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

None of the ingredients is listed.

- **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.

- **Department issuing SDS:** ND Industries, Inc. - Safety, Health and Environmental Affairs

- **Contact:** Safety, Health and Environmental Affairs

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/15/2020

Reviewed on 09/15/2020

Trade name: Vibra-TITE

(Contd. of page 6)

- Classification System:

- HMIS-ratings (scale 0 - 4)

| | | |
|------------|---|----------------|
| HEALTH | 2 | Health = 2 |
| FIRE | 3 | Fire = 3 |
| REACTIVITY | 0 | Reactivity = 0 |

- NFPA ratings (scale 0 - 4)

| | | | |
|---|---|---|----------------|
| 2 | 3 | 0 | Health = 2 |
| | | | Fire = 3 |
| | | | Reactivity = 0 |

- Date of preparation / last revision 09/15/2020 / -

- Abbreviations and acronyms:

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)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 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
 BEI: Biological Exposure Limit
 Flam. Liq. 2: Flammable liquids – Category 2
 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- Disclaimer

The information set forth is based on information that ND Industries, Incorporated believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and ND Industries Inc. assumes no legal responsibility for use or reliance thereon. In the event of a discrepancy between the information on the non-English document and its English counterpart, the English version shall supersede.

@ND and ND Industries, Inc. are registered trademarks of ND Industries Incorporated,
 @Vibra-TITE is a registered trademark of ND Industries, Inc.