Safety Data Sheet
acc. to OSHA HCS

Printing date 04/30/2015 *Reviewed on 04/30/2015*

* 1 Identification

- ***Product identifier***
  - ***Trade name:*** Vibra-TITE® Retaining Compound
    - ***Synonyms:*** 680 High Strength - Slip Fit Retaining Compound
    - ***Part number:*** VT680
  - ***Relevant identified uses of the substance or mixture*** Part retaining
- ***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***


GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2A	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.

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


GHS07

    - ***Signal word*** Warning
    - ***Hazard-determining components of labeling:***
      maleic anhydride
    - ***Hazard statements***
      H315 Causes skin irritation.
      H319 Causes serious eye irritation.
      H317 May cause an allergic skin reaction.
    - ***Precautionary statements***

P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves.
P280	Wear eye protection / face protection.
P264	Wash thoroughly after handling.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P363	Wash contaminated clothing before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	If on skin: Wash with plenty of water.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

  - ***Additional information:***
    42.8 percent of the mixture consists of ingredient(s) of unknown toxicity.

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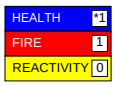
- ***Classification system:***
  - ***NFPA ratings (scale 0 - 4)***

Health = 1
Fire = 1
Reactivity = 0

  - ***HMIS-ratings (scale 0 - 4)***



Health = *1
Fire = 1
Reactivity = 0

- ***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:***

27813-02-1	Hydroxypropyl methacrylate	30-40%
	Polyester Resin	10-20%
80-15-9	Cumene hydroperoxide	1-5%
108-31-6	maleic anhydride	≤ 1.00%

* 4 First-aid measures

- ***Description of first aid measures***
  - ***After inhalation:***
    In case of unconsciousness place patient stably in side position for transportation.
    Supply fresh air; consult doctor in case of complaints.
  - ***After skin contact:*** Immediately wash with water and soap and rinse thoroughly.
  - ***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***
  Ensure adequate ventilation
  Wear protective clothing.
- ***Environmental precautions:*** 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.

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Prevent formation of aerosols.
- ***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:*** 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:***	
80-15-9 Cumene hydroperoxide	
WEEL	Long-term value: 6 mg/m³, 1 ppm Skin

- ***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 and skin.
  - ***Breathing equipment:***
    Not required.
    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.
    - ***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:***

Tightly sealed goggles

  - ***Body protection:*** Protective work clothing

* 9 Physical and chemical properties

- ***Information on basic physical and chemical properties***
  - ***General Information***
  - ***Appearance:***
    - ***Form:*** Fluid
    - ***Color:*** Green
  - ***Odor:*** Weak, characteristic
  - ***Odour threshold:*** Not determined.

- ***pH-value:***	Not determined.
- ***Change in condition***	
- ***Melting point/Melting range:***	Undetermined.
- ***Boiling point/Boiling range:***	999 °C (1830 °F)
- ***Flash point:***	95 °C (203 °F)
- ***Flammability (solid, gaseous):***	Not applicable.

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- ***Ignition temperature:***
  - ***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.
  - ***Upper:*** Not determined.
- ***Vapor pressure:*** Not determined.
- ***Density at 20 °C (68 °F):*** 1.1 g/cm³ (9.18 lbs/gal)
  - ***Relative density*** Not determined.
  - ***Vapour density*** Not determined.
  - ***Evaporation rate*** Not determined.
- ***Solubility in / Miscibility with***
  - ***Water:*** Not miscible or difficult to mix.
- ***Partition coefficient (n-octanol/water):*** Not determined.
- ***Viscosity:***
  - ***Dynamic at 20 °C (68 °F):*** 1500 mPas
  - ***Kinematic:*** Not determined.
- ***Solvent content:***
  - ***Organic solvents:*** 0.4 %
  - ***Water:*** 0.1 %
  - ***VOC content:*** 0.4 %
    4.5 g/l / 0.04 lb/gl
  - ***Solids content:*** 20.4 %
- ***Other information*** No further relevant information available.

10 Stability and reactivity

- ***Reactivity***
  - ***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:***

80-15-9 Cumene hydroperoxide		
Oral	LD50	382 mg/kg (rat)
Dermal	LD50	500 mg/kg (rat)
Inhalative	LC50/4 h	220 mg/l (rat)
108-31-6 maleic anhydride		
Oral	LD50	400 mg/kg (rat)
Dermal	LD50	2620 mg/kg (rabbit)

  - ***Primary irritant effect:***
    - ***on the skin:*** Irritant to skin and mucous membranes.
    - ***on the eye:*** Irritating effect.
  - ***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)***

None of the ingredients is listed.

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- ***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.

14 Transport information

- ***UN-Number***	
- ***DOT, ADN, IMDG, IATA***	not regulated
- ***UN proper shipping name***	
- ***DOT, ADN, IMDG, IATA***	not regulated
- ***Transport hazard class(es)***	
- ***DOT, ADN, IMDG, IATA***	
- ***Class***	not regulated
- ***Packing group***	
- ***DOT, IMDG, IATA***	not regulated
- ***Environmental hazards:***	
- ***Marine pollutant:***	No
- ***Special precautions for user***	Not applicable.
- ***Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code***	Not applicable.
- ***UN "Model Regulation":***	-

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):***

80-15-9	Cumene hydroperoxide
	ethylene glycol
108-31-6	maleic anhydride

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

Ethoxylated Bisphenol A Dimethacrylate Esters
Hydroxypropyl methacrylate
Cumene hydroperoxide

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Saccharin
Polyethylene glycol dimethacrylate
Propylene glycol
2'-phenylacetohydrazide
ethylene glycol
maleic anhydride
1,4-naphthoquinone
Deionized water

- ***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)***		
	ethylene glycol	A4
108-31-6	maleic anhydride	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 Affaires
- ***Contact:*** Safety, Health and Environmental Affaires
- ***Date of preparation / last revision*** 04/30/2015 / 4
- ***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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

- **** Data compared to the previous version altered.***
- ***Disclaimer***

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