SAFETY DATA SHEET

1. Identification

Material name: Vulkem® 360 NF
Material: 153360 501

Recommended use and restriction on use

   Recommended use: Colorant
   Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S Sealants
3735 Green Road
Beachwood OH 44122
US

   Contact person: EH&S Department
   Telephone: 216-292-5000
   Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

   Health Hazards
   
   Serious Eye Damage/Eye Irritation Category 2A
   Toxic to reproduction Category 1B

   Unknown toxicity - Health
   Acute toxicity, oral 0 %
   Acute toxicity, dermal 0 %
   Acute toxicity, inhalation, vapor 100 %
   Acute toxicity, inhalation, dust or mist 100 %

   Environmental Hazards
   Acute hazards to the aquatic environment Category 1

   Unknown toxicity - Environment
   Acute hazards to the aquatic environment 30.32 %
   Chronic hazards to the aquatic environment 100 %

Label Elements

   Hazard Symbol:
Signal Word: Danger

Hazard Statement: Causes serious eye irritation.
May damage fertility or the unborn child.
Very toxic to aquatic life.

Precautionary Statements

Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Collect spillage.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butyl benzyl phthalate</td>
<td>85-68-7</td>
<td>60 - 100%</td>
</tr>
<tr>
<td>Dibutyl tin dilaurate</td>
<td>77-58-7</td>
<td>30 - 60%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed
Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed
Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media
Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Special fire fighting procedures: No data available.
Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: No data available.

Methods and material for containment and cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.
7. Handling and storage

Precautions for safe handling: Wash hands thoroughly after handling. Avoid contact with eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store locked up.

8. Exposure controls/personal protection

Control Parameters

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
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<tbody>
<tr>
<td>Dibutyl tin dilaurate - as Sn</td>
<td>STEL</td>
<td>0.2 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>0.1 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
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<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
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<tr>
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<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
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Appropriate Engineering Controls: Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Wear safety glasses with side shields (or goggles).
Skin Protection
Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Avoid contact with eyes. Observe good industrial hygiene practices. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

9. Physical and chemical properties

Appearance
Physical state: liquid
Form: Paste
Color: Pale yellow
Odor: Mild
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: No data available.
Initial boiling point and boiling range: No data available.
Flash Point: 212 °C 414 °F (Tag closed cup)
Evaporation rate: Slower than Ether
Flammability (solid, gas): No

Upper/lower limit on flammability or explosive limits
Flammability limit - upper (%): No data available.
Flammability limit - lower (%): No data available.
Explosive limit - upper (%): No data available.
Explosive limit - lower (%): No data available.

Vapor pressure: No data available.
Vapor density: Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density: 1.09

Solubility(ies)
Solubility in water: Practically Insoluble
Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates).

Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: Moderately irritating to skin with prolonged exposure.

Eye contact: Causes serious eye irritation.

Ingestion: May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: ATEmix: 4,288.12 mg/kg

Dermal Product: ATEmix: 6,597.11 mg/kg

Inhalation Product: No data available.

Repeated dose toxicity Product: No data available.
Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):
- Butyl benzyl phthalate in vivo (Rabbit): Not irritant  Experimental result, Key study
- Dibutyl tin dilaurate In vitro (Human, in vitro reconstituted epidermis model): Not irritant  Experimental result, Supporting study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):
- Butyl benzyl phthalate Rabbit, 24 - 72 hrs: Not irritating
- Dibutyl tin dilaurate Rabbit, 24 hrs: Highly irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity

Product: May damage fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.
Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
- Butyl benzyl phthalate
  LC 50 (Fathead minnow (Pimephales promelas), 96 h): 1.39 - 3.88 mg/l Mortality
- Dibutyl tin dilaurate
  LC 50 (Ide, silver or golden orfe (Leuciscus idus), 48 h): 2 mg/l Mortality

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
- Butyl benzyl phthalate
  EC 50 (Water flea (Daphnia magna), 48 h): > 10 mg/l Intoxication
  EC 50 (Opossum shrimp (Americamysis bahia), 48 h): > 0.9 mg/l Mortality
  EC 50 (Water flea (Daphnia magna), 24 h): > 10 mg/l Intoxication
  EC 50 (Water flea (Daphnia magna), 21 d): > 0.76 mg/l Intoxication
  EC 50 (Water flea (Daphnia magna), 14 d): > 0.76 mg/l Intoxication
- Dibutyl tin dilaurate
  EC 50 (Water flea (Daphnia magna), 24 h): 0.66 mg/l Intoxication

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
- Butyl benzyl phthalate
  NOAEL (Pimephales promelas, 126 d): 64.6 - 67.5 µg/l Experimental result, Key study
  NOAEL (Oncorhynchus mykiss, 124 d): 0.2 mg/l Experimental result, Key study
  LOAEL (Pimephales promelas, 126 d): 18.1 µg/l Experimental result, Key study
  LC 50 (Pimephales promelas, 4 d): 2.32 mg/l Experimental result, Supporting study
  LC 50 (Pimephales promelas, 14 d): 2.25 mg/l Experimental result, Supporting study
Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability
Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Specified substance(s):
Butyl benzyl phthalate Bluegill (Lepomis macrochirus), Bioconcentration Factor (BCF): 772 (Flow through)

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Specified substance(s):
Butyl benzyl phthalate Log Kow: 4.91
Dibutyl tin dilaurate Log Kow: 3.12

Mobility in soil: No data available.
Other adverse effects: Very toxic to aquatic organisms.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG: Not Regulated
CFR / DOT:
Not Regulated

IMDG:
UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Butyl Benzyl Phthalate), 9, PG III, MARINE POLLUTANT

Further Information:
The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

15. Regulatory information

US Federal Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

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Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

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SARA 311/312 Hazardous Chemical

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SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.
US State Regulations

US. California Proposition 65

WARNING
Reproductive Harm - www.P65Warnings.ca.gov

US. New Jersey Worker and Community Right-to-Know Act
Chemical Identity
Butyl benzyl phthalate

US. Massachusetts RTK - Substance List
Chemical Identity
Butyl benzyl phthalate

US. Pennsylvania RTK - Hazardous Substances
Chemical Identity
Butyl benzyl phthalate

US. Rhode Island RTK
Chemical Identity
Dibutyl tin dilaurate

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

VOC:
Regulatory VOC (less water and exempt solvent) : 0 g/l
VOC Method 310 : 0.00 %
Inventory Status:

Australia AICS: All components in this product are listed on or exempt from the Inventory.

Canada DSL Inventory List: All components in this product are listed on or exempt from the Inventory.

EINECS, ELINCS or NLP: All components in this product are listed on or exempt from the Inventory.

Japan (ENCS) List: All components in this product are listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances: All components in this product are listed on or exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): All components in this product are listed on or exempt from the Inventory.

Canada NDSL Inventory: One or more components in this product are not listed on or exempt from the Inventory.

Philippines PICCS: All components in this product are listed on or exempt from the Inventory.

US TSCA Inventory: All components in this product are listed on or exempt from the Inventory.

New Zealand Inventory of Chemicals: All components in this product are listed on or exempt from the Inventory.

Japan ISHL Listing: All components in this product are listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing: One or more components in this product are not listed on or exempt from the Inventory.

16. Other information, including date of preparation or last revision

Revision Date: 07/21/2018

Version #: 1.1

Further Information: No data available.
Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.