1. IDENTIFICATION

Product Description: AUGEOP CLEAN MULTI
CAS # 100-79-8
Other means of identification
Vigon Item # 505110
Recommended use Cleaning Agent; Diluent and vehicle for fragrance
Recommended restrictions For Manufacturing Use Only

Company
Vigon International, Inc.
127 Airport Road
E. Stroudsburg, PA 18301
For information call: 570-476-6300
Web Site: www.vigon.com

Manufacturer/Importer/Supplier/Distributor information

2. HAZARD(S) IDENTIFICATION

Physical hazards Flammable liquids Category 4
Health hazards Serious eye damage/eye irritation Category 2A
Environmental hazards Not classified.

Label elements

Signal word Warning
Hazard statement Combustible liquid. Causes serious eye irritation.
Precautionary statement
Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
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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. In case of fire: Use appropriate media to extinguish.

Storage
Store in a well-ventilated place.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Supplemental information
100% of the mixture consists of component(s) of unknown acute dermal toxicity. 100% of the mixture consists of component(s) of unknown acute inhalation toxicity. 100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substances</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2-dimethyl-1,3-dioxylene-4-methanol</td>
<td>acetone monoglycerol ketal glycerinisopropylidene ether 4- hydroxymethyl-2,2-dimethyl-1,3-dioxolan e 1,2-iso propyldenglycerin 2,3-(iso propyldenedioxy)propanol</td>
<td>100-79-8</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

Inhalation
If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.

Skin contact
Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.

Eye contact
Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids.

Ingestion
Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

Most important symptoms/effects, acute and delayed
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Indication of immediate medical attention and special treatment needed
Not available.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire.
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Specific hazards arising from the chemical
Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

Fire fighting equipment/instructions
In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.

Specific methods
Use water spray to cool unopened containers.

General fire hazards
Static charges generated by emptying package in or near flammable vapor may cause flash fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

Methods and materials for containment and cleaning up
Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.

Environmental precautions
Retain and dispose of contaminated wash water. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. HANDLING AND STORAGE

Precautions for safe handling
Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities
Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits   This substance has no PEL, TLV, or other recommended exposure limit.
Biological limit values        No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls Use explosion-proof ventilation equipment to stay below exposure limits. Adequate ventilation should be provided so that exposure limits are not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection             Wear safety glasses with side shields (or goggles).
Skin protection                Chemical resistant gloves.
Hand protection                Chemical resistant gloves.
Other                        Not available.
Respiratory protection         Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must be provided.
Thermal hazards                Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance         Refer to Spec Sheet
Physical state     Liquid.
Form              Liquid.
Color             Refer to Spec Sheet
Odor              Characteristic.
Odor threshold    Not available.
pH                Not available.
Melting point/freezing point -16.6 °F (-27 °C)
Initial boiling point and boiling range 370.4 °F (188 °C)
Flash point       196.0 °F (91.1 °C) Closed Cup
Evaporation rate   0.03 BuAc
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits
Flammability limit - lower (%) Not available.
Flammability limit - upper (%) Not available.
Explosive limit - lower (%) Not available.
Explosive limit - upper (%) Not available.
Vapor pressure   0.04 mm Hg at 20 °C
Vapor density     2.6
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Relative density
Solubility(ies)
   Solubility (water)
Partition coefficient
   (n-octanol/water)
Auto-ignition temperature
Decomposition temperature
Viscosity
Other information
   Explosive properties
   Molecular formula
   Molecular weight
   Oxidizing properties
   Specific gravity

10. STABILITY AND REACTIVITY
Reactivity
Chemical stability
Possibility of hazardous reactions
Conditions to avoid
Incompatible materials
Hazardous decomposition products

11. TOXICOLOGICAL INFORMATION
Information on likely routes of exposure
   Inhalation
   Skin contact
   Eye contact
   Ingestion
Symptoms related to the physical, chemical and toxicological characteristics
Information on toxicological effects
   Acute toxicity

Not available.
Soluble
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
Soluble C6H12O3 132.16 g/mol Not oxidizing.
1.07 at 25 °C
The product is stable and non-reactive under normal conditions of use, storage and transport.
Material is stable under normal conditions.
No dangerous reaction known under conditions of normal use.
Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Strong oxidizing agents.
No hazardous decomposition products if stored and handled as indicated.
No adverse effects due to inhalation are expected.
No adverse effects due to skin contact are expected.
Causes serious eye irritation.
Expected to be a low ingestion hazard.
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Not known.
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Revision Date: 06-19-2018
Version # 02

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2-dimethyl-1,3-dioxylene- 4-methanol (CAS 100-79-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td>Mouse</td>
<td>7000 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td>Mouse</td>
<td>3000 mg/kg Intraperitoneal</td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>7000 mg/kg</td>
</tr>
<tr>
<td>Other</td>
<td>Mouse</td>
<td>3000 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
- No skin irritation
- Method: OECD Test Guideline 404
- Unpublished internal reports

Serious eye damage/eye irritation
- Causes serious eye irritation.
- Method: OECD Test Guideline 405
- Unpublished internal reports

Respiratory or skin sensitization
- Not a respiratory sensitizer.
- Did not cause sensitization on laboratory animals.
- Method: OECD Test Guideline 406
- Unpublished internal reports

Germ cell mutagenicity
- Genotoxicity in vitro : Mutagenicity (Salmonella typhimurium - reverse mutation assay)
  - negative
  - Unpublished internal reports

- Genotoxicity in vivo : Mutagenicity (micronucleus test)
  - negative
  - Unpublished internal reports

Carcinogenicity
- IARC Monographs. Overall Evaluation of Carcinogenicity
  - Not listed.
  - Not regulated.
- US. National Toxicology Program (NTP) Report on Carcinogens
  - Not listed.
- US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
  - Not available.

Reproductive toxicity
- This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
- Not classified.

Specific target organ toxicity - repeated exposure
- Not classified.

Aspiration hazard
- Not an aspiration hazard.
12. ECOLOGICAL INFORMATION

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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</thead>
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<td>2,2-dimethyl-1,3-dioxylane- 4-methanol (CAS 100-79-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>LC50</td>
<td>Water flea (Daphnia similis) &gt; 1000 mg/l, 24 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 1000 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) &gt; 15200 - &lt; 18300 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
Zahn-Wellens Test
Inherently biodegradable.

Bioaccumulative potential
Partition coefficient: n-octanol/water : Not potentially bioaccumulable
Bioconcentration factor (BCF) : Bioconcentration factor (BCF): 1.3

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructions
Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
Not established.

Waste from residues / unused products
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADN
Not regulated as dangerous goods.

ADR
Not regulated as dangerous goods.

RID
Not regulated as dangerous goods.

DOT

BULK

<table>
<thead>
<tr>
<th>UN number</th>
<th>NA1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>COMBUSTIBLE LIQUID, N.O.S. (2,2-dimethyl-1,3-dioxylane- 4-methanol)</td>
</tr>
</tbody>
</table>
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Packing group       III
Environmental hazards
  Marine pollutant  No
Packaging exceptions 150
Packaging bulk      241
Labels required     None

DOT
NON-BULK
  Not regulated as dangerous goods.
IATA
  Not regulated as dangerous goods.
IMDG
  Not regulated as dangerous goods.

15. REGULATORY INFORMATION

US federal regulations
  This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
  CERCLA Hazardous Substance List (40 CFR 302.4)
    Not listed.
  SARA 304 Emergency release notification
    Not regulated.
  US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
    Not available.
  OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
    Not regulated.
  TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
    Not regulated.
Superfund Amendments and Reauthorization Act of 1986 (SARA)
  SARA 302 Extremely hazardous substance
    Not listed.
  SARA 311/312 Hazardous chemical
    Yes
      Classified hazard categories
      Flammable (gases, aerosols, liquids, or solids)
      Serious eye damage or eye irritation
  SARA 313 (TRI reporting)
    Not regulated.

Other federal regulations
  Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
    Not regulated.
  Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
    Not regulated.
| Safe Drinking Water Act (SDWA) | Not regulated. |
| US state regulations | California Proposition 65 |
| California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance | Not listed. |

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

| Issue date | 11-18-2015 |
| Revision date | 06-19-2018 |
| Version # | 02 |
| HMIS® ratings | Health: 2 |
| | Flammability: 2 |
| | Physical hazard: 0 |

### Disclaimer

Vigon International, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Vigon International, Inc. has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing this product to assess its’ safety in the final application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon’s knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.

### Revision information

This document has undergone significant changes and should be reviewed in its entirety.