SAFETY DATA SHEET

Eagle One™ 20/20 PERFECT VISION GLASS CLEANER
783214

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<table>
<thead>
<tr>
<th>Ashland</th>
<th>Regulatory Information Number</th>
<th>1-800-325-3751</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.O. Box 2219</td>
<td>Telephone</td>
<td>614-790-3333</td>
</tr>
<tr>
<td>Columbus, OH 43216</td>
<td>Emergency telephone number</td>
<td>1-800-ASHLAND (1-800-274-5263)</td>
</tr>
</tbody>
</table>

Product name: Eagle One™ 20/20 PERFECT VISION GLASS CLEANER

Product code: 783214

Product Use Description: GLASS CLEANER

2. HAZARDS IDENTIFICATION

**Emergency Overview**

Appearance: liquid, colourless

CAUTION! COMBUSTIBLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS.

**Potential Health Effects**

**Exposure routes**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

**Eye contact**

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

**Skin contact**

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

**Ingestion**

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Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

**Inhalation**
Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

**Aggravated Medical Condition**
Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions), kidney, Liver

**Symptoms**
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: metallic taste, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Cough, Difficulty in breathing, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), Lowered blood pressure, Lack of coordination, Shortness of breath, pain in the abdomen and lower back, mild, temporary changes in the liver, effects on heart rate, respiratory depression (slowing of the breathing rate), confusion, lung edema (fluid buildup in the lung tissue), kidney damage, liver damage, coma

**Target Organs**
Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans., Breathing isopropanol vapors has caused damage to the lining of the middle ear in experimental animals. The relevance of this finding to humans is uncertain., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, kidney damage

**Carcinogenicity**
This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**
This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPYLENE GLYCOL MONOPROPYL ETHER</td>
<td>1569-01-3</td>
<td>&gt;=1.5-&lt;5%</td>
</tr>
<tr>
<td>ISOPROPANOL</td>
<td>67-63-0</td>
<td>&gt;=1.5-&lt;5%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Eyes**
If symptoms develop, immediately move individual away from exposure and into fresh air.
Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**Skin**
Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

**Ingestion**
Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**Inhalation**
If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Notes to physician**
- **Hazards:** Administration of high doses of isopropanol in combination with known hepatotoxic chemicals resulted in enhanced liver toxicity in experimental animals.
- **Treatment:** No information available.
5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Dry chemical, Carbon dioxide (CO2)

Hazardous combustion products
carbon dioxide and carbon monoxide

Precautions for fire-fighting
If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification
Combustible Liquid Class IIIA

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

Environmental precautions
Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Other information
Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water spray jet.

7. HANDLING AND STORAGE

Handling
Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage
Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>ISOPROPANOL</th>
<th>67-63-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH time weighted average</td>
<td>200 ppm</td>
</tr>
<tr>
<td>ACGIH Short term exposure limit</td>
<td>400 ppm</td>
</tr>
<tr>
<td>NIOSH Recommended exposure limit (REL):</td>
<td>400 ppm</td>
</tr>
<tr>
<td>NIOSH Recommended exposure limit (REL):</td>
<td>980 mg/m3</td>
</tr>
<tr>
<td>NIOSH Short term exposure limit</td>
<td>500 ppm</td>
</tr>
<tr>
<td>NIOSH Short term exposure limit</td>
<td>1,225 mg/m3</td>
</tr>
<tr>
<td>OSHA Z1 Permissible exposure limit</td>
<td>400 ppm</td>
</tr>
<tr>
<td>OSHA Z1 Permissible exposure limit</td>
<td>980 mg/m3</td>
</tr>
</tbody>
</table>

General advice
These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls
General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to
maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Eye protection**
Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

**Skin and body protection**
Not normally required. However, wear resistant gloves such as nitrile rubber to prevent irritation which may result from prolonged or repeated skin contact with product. Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

**Respiratory protection**
Respiratory protection is not required under normal conditions of use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>liquid</td>
</tr>
<tr>
<td><strong>Form</strong></td>
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<tr>
<td><strong>Colour</strong></td>
<td>colourless</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>characteristic</td>
</tr>
<tr>
<td><strong>Boiling point/boiling range</strong></td>
<td>180.5 °F / 82.5 °C @ 1,013.23 hPa Calculated</td>
</tr>
<tr>
<td><strong>Melting point/range</strong></td>
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<tr>
<td><strong>Sublimation point</strong></td>
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<tr>
<td><strong>pH</strong></td>
<td>(Average) 5.5</td>
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<tr>
<td><strong>Flash point</strong></td>
<td>197.01 °F / 91.67 °C Tag closed cup</td>
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<tr>
<td><strong>Ignition temperature</strong></td>
<td>no data available</td>
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<tr>
<td><strong>Evaporation rate</strong></td>
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<tr>
<td><strong>Lower explosion limit/Upper explosion limit</strong></td>
<td>1.3 %(V) / 16.9 %(V) Calculated Explosive Limit</td>
</tr>
<tr>
<td><strong>Particle size</strong></td>
<td>no data available</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>60.527 hPa @ 77 °F / 25 °C Calculated Vapor Pressure</td>
</tr>
<tr>
<td><strong>Relative vapour density</strong></td>
<td>no data available</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>(+/- 0.005) 0.995 g/cm3 @ 60.00 °F / 15.56 °C</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

None known.

Incompatible products

Acids, Aldehydes, alkalis, Amines, chlorinated hydrocarbons, Ethylene oxide, halogens, isocyanates, Strong oxidizing agents, Do not use with aluminum equipment at temperatures above 120 degrees F., strong bases

Hazardous decomposition products

carbon dioxide and carbon monoxide

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION
Acute oral toxicity
PROPYLENE GLYCOL MONOPROPYL ETHER : LD 50 Rat: 2,504 mg/kg
ISOPROPANOL : no data available

Acute inhalation toxicity
PROPYLENE GLYCOL MONOPROPYL ETHER : LC 50 Rat: > 2230 ppm; 6 h
ISOPROPANOL : LC 50 Rat: 16000 ppm; 4 h

Acute dermal toxicity
PROPYLENE GLYCOL MONOPROPYL ETHER : no data available
ISOPROPANOL : no data available

12. ECOLOGICAL INFORMATION

Biodegradability
PROPYLENE GLYCOL MONOPROPYL ETHER : no data available
ISOPROPANOL : no data available

Bioaccumulation
PROPYLENE GLYCOL MONOPROPYL ETHER : no data available
ISOPROPANOL : no data available

Ecotoxicity effects

Toxicity to fish
PROPYLENE GLYCOL MONOPROPYL ETHER : 96 h LC 50 Oncorhynchus mykiss (rainbow trout): > 100.00 mg/l
ISOPROPANOL : 96 h LC 50 Fathead minnow (Pimephales promelas): 5,770.00 - 7,450.00 mg/l Method: Flow through; Mortality
Toxicity to daphnia and other aquatic invertebrates.

**PROPYLENE GLYCOL MONOPROPYL ETHER**: 48 h EC 50 Water flea (Daphnia): > 100.00 mg/l

**ISOPROPANOL**: 24 h static test LC 50 Water flea (Daphnia magna): > 10,000.00 mg/l Method: Static Mortality

Toxicity to algae

**PROPYLENE GLYCOL MONOPROPYL ETHER**: 96 h Growth inhibition EC 50 Green algae: 1,466.00 mg/l

**ISOPROPANOL**: no data available

Toxicity to bacteria

**PROPYLENE GLYCOL MONOPROPYL ETHER**: no data available

**ISOPROPANOL**: no data available

Biochemical Oxygen Demand (BOD)

**PROPYLENE GLYCOL MONOPROPYL ETHER**: no data available

**ISOPROPANOL**: no data available

Chemical Oxygen Demand (COD)

**PROPYLENE GLYCOL MONOPROPYL ETHER**: no data available

**ISOPROPANOL**: no data available

Additional ecological information

**PROPYLENE GLYCOL MONOPROPYL ETHER**: no data available

**ISOPROPANOL**: no data available

### 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations.
## 14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>REGULATION</th>
<th>ID NUMBER</th>
<th>PROPER SHIPPING NAME</th>
<th>*HAZARD CLASS</th>
<th>SUBSIDIARY HAZARDS</th>
<th>PACKING GROUP</th>
<th>MARINE POLLUTANT / LTD. QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. DOT - ROAD</td>
<td></td>
<td>Not dangerous goods</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>U.S. DOT - RAIL</td>
<td></td>
<td>Not dangerous goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. DOT - INLAND WATERWAYS</td>
<td></td>
<td>Not dangerous goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSPORT CANADA - ROAD</td>
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<td>Not dangerous goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSPORT CANADA - RAIL</td>
<td></td>
<td>Not dangerous goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSPORT CANADA - INLAND WATERWAYS</td>
<td></td>
<td>Not dangerous goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTERNATIONAL MARITIME DANGEROUS GOODS</td>
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<td>Not dangerous goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO</td>
<td></td>
<td>Not dangerous goods</td>
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<td></td>
</tr>
<tr>
<td>INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER</td>
<td></td>
<td>Not dangerous goods</td>
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</tr>
<tr>
<td>MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES</td>
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<td>Not dangerous goods</td>
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</tr>
</tbody>
</table>

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID
Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA Hazard Classification
Fire Hazard
Acute Health Hazard

New Jersey RTK Label Information
WATER 7732-18-5
ISOPROPANOL 67-63-0
PROPYLENE GLYCOL MONOPROPYL ETHER 1569-01-3

Pennsylvania RTK Label Information
WATER 7732-18-5
ISOPROPANOL 67-63-0

Notification status
US. Toxic Substances Control Act y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). q (quantity restricted)
Australia. Industrial Chemical (Notification and Assessment) Act y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand n (Negative listing)
Japan. Kashin-Hou Law List n (Negative listing)
Korea. Toxic Chemical Control Law (TCCL) List y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act n (Negative listing)
China. Inventory of Existing Chemical Substances y (positive listing)
16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).