1. Identification

Product identifier: HYLO®CLEAN

Other means of identification:

- SDS number: 46
- Recommended use: Solvent cleaner.
- Recommended restrictions: All other uses.

Manufacturer/Importer/Supplier/Distributor information:

- Manufacturer: Hylomar Ltd.
- Address: Hylo House, Cale Lane, New Springs, Wigan, Greater Manchester, UK, WN2 1JT
- Telephone number: +44(0)1942 617000
- E-mail address: info@hylomar.co.uk
- Contact person: Technical Department
- Emergency telephone: 1.866.519.4752 (USA, Canada, Mexico) 1-760-476-3962
- Access code: 333544

2. Hazard(s) identification

Physical hazards: Flammable aerosols Category 1

Health hazards:

- Serious eye damage/eye irritation Category 2A
- Specific target organ toxicity, single exposure Category 3 narcotic effects

OSHA defined hazards: Not classified.

Label elements:

Signal word: Danger

Hazard statement: Extremely flammable aerosol. Pressurized container: May burst if heated. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary statement:

Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Avoid breathing mist/vapors/spray. Use only outdoors or in a well-ventilated area. Keep out of reach of children.

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 inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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

Hazard(s) not otherwise classified (HNOC): Repeated exposure may cause skin dryness or cracking.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures
### Composition comments
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

#### Inhalation
Move into fresh air and keep at rest. If not breathing, give artificial respiration or give oxygen by trained personnel. Get medical attention if any discomfort continues.

#### Skin contact
Take off immediately all contaminated clothing. Wash skin thoroughly with soap and water. If irritation persists get medical attention.

#### Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove any contact lenses. Get medical attention if any discomfort continues.

#### Ingestion
Symptoms may include redness, edema, drying, defatting and cracking of the skin. Irritation of eyes and mucous membranes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

#### Most important symptoms/effects, acute and delayed
Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen.

#### Indication of immediate medical attention and special treatment needed
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

#### Suitable extinguishing media
Water spray, foam, dry powder or carbon dioxide.

#### Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

#### Specific hazards arising from the chemical
The product is extremely flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. By heating and fire, harmful vapors/gases may be formed. Contents under pressure. Containers may explode when heated.

#### Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

#### Fire fighting equipment/instructions
Cool containers exposed to heat with water spray and remove container, if no risk is involved. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures
Eliminate all ignition sources (no smoking, flames, sparks, or flames in immediate area). Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Avoid inhalation of vapors/spray and contact with skin and eyes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear protective clothing as described in Section 8 of this SDS.

#### Methods and materials for containment and cleaning up
Eliminate all ignition sources. Stop leak if you can do so without risk. Ventilate the area. Wipe up with absorbent material (e.g. cloth, fleece). Transfer to a container for disposal. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

#### Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not discharge into drains, water courses or onto the ground.

### 7. Handling and storage

#### Precautions for safe handling
Do not use in areas without adequate ventilation. Avoid inhalation of vapors and spray mist and contact with skin and eyes. Avoid prolonged exposure. Keep away from sources of ignition - No smoking. The product is extremely flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Wear protective clothing as described in Section 8 of this safety data sheet. Wash thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
Follow rules for flammable liquids. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Store in closed original container at temperatures between 0°C and 40°C. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Keep in an area equipped with sprinklers. Keep away from food, drink and animal feedingstuffs. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from incompatible material.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>PEL 2400 mg/m3 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Petroleum gases, liquefied; petroleum gas (CAS 68476-85-7)</td>
<td>PEL 1800 mg/m3 1000 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>US. ACGIH Threshold Limit Values</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>STEL 500 ppm TWA 250 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>US. NIOSH: Pocket Guide to Chemical Hazards</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>TWA 590 mg/m3 250 ppm</td>
<td></td>
</tr>
<tr>
<td>Petroleum gases, liquefied; petroleum gas (CAS 68476-85-7)</td>
<td>TWA 1800 mg/m3 1000 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Biological limit values</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>ACGIH Biological Exposure Indices</td>
<td>25 mg/l</td>
<td>Acetone</td>
<td>Urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Exposure guidelines

Follow standard monitoring procedures.

Appropriate engineering controls

Good general ventilation 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. Use explosion-proof equipment. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection

Use approved safety goggles or face shield.

Skin protection

Wear protective gloves. Butyl rubber gloves are recommended. Breakthrough time >120 min. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Hand protection

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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
- Physical state: Liquid.
- Form: Aerosol.
- Color: Clear.

Odor: Organic solvents.
Odor threshold: Not available.

pH: Not available.
Melting point/freezing point: Not available.
Initial boiling point and boiling range: Not available.

Flash point: -40.0 °F (-40.0 °C)
Evaporation rate: Not available.

Flammability (solid, gas): Not applicable.
Upper/lower flammability or explosive limits
- Flammability limit - lower (%): 1.8 %
- Flammability limit - upper (%): 9.5 %

Vapor pressure: Not available.
Vapor density: Not available.
Relative density: Not available.

Solubility(ies)
- Solubility (water): Soluble in water.
- Partition coefficient (n-octanol/water): Not available.

Auto-ignition temperature: 770 - 1076 °F (410 - 580 °C)
Decomposition temperature: Not available.
Viscosity: Not available.

Other information
- Explosive properties: Not explosive.
- Oxidizing properties: Not oxidizing.
- VOC: < 693 g/l

10. Stability and reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Risk of ignition. Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Heat, flames and sparks. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F.


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: Vapors may cause drowsiness and dizziness. In high concentrations, vapors may be irritating to the respiratory system.
- Skin contact: Repeated exposure may cause skin dryness or cracking.
- Eye contact: Causes serious eye irritation.
- Ingestion: Not likely, due to the form of the product. However: Ingestion may cause irritation and malaise.
Symptoms related to the physical, chemical and toxicological characteristics

Symptoms may include redness, edema, drying, defatting and cracking of the skin. Irritation of eyes and mucous membranes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity

Arrhythmia, (deviation from normal heart beat). In high concentrations, vapors and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td></td>
</tr>
<tr>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td>&gt; 7400 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td></td>
</tr>
<tr>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td>76 mg/l, 4 Hours</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td></td>
</tr>
<tr>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td>5800 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

Not a skin sensitizer.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Reproductive toxicity

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

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Not likely, due to the form of the product.

Chronic effects

None known.

Further information

No other specific acute or chronic health impact noted.

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.

Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td></td>
</tr>
<tr>
<td>NOEC</td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td></td>
</tr>
<tr>
<td>430 mg/l, 96 hours</td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td></td>
</tr>
<tr>
<td>Water flea (Daphnia pulex)</td>
<td></td>
</tr>
<tr>
<td>8800 mg/l, 48 hours</td>
<td></td>
</tr>
<tr>
<td>NOEC</td>
<td></td>
</tr>
<tr>
<td>Water flea (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td>2212 mg/l, 28 days (Reproduction)</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td></td>
</tr>
<tr>
<td>Oncorhynchus mykiss</td>
<td></td>
</tr>
<tr>
<td>5540 mg/l, 96 hours</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability

The product is expected to be biodegradable.

Bioaccumulative potential

The product is not expected to bioaccumulate.

Partition coefficient n-octanol / water (log Kow)

Acetone (CAS 67-64-1)

-0.24
Mobility in soil

The product contains organic solvents which will evaporate easily from all surfaces.

Mobility in general

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

Other adverse effects

The product is a volatile organic compound which has a photochemical ozone creation potential.

13. Disposal considerations

Disposal instructions

Do not discharge into drains, water courses or onto the ground. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose of in accordance with local regulations.

Hazardous waste code

D001: Waste Flammable material with a flash point <140 °F

US RCRA Hazardous Waste U List: Reference

Acetone (CAS 67-64-1) U002

Waste from residues / unused products

Dispose of in accordance with local regulations. 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

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN1950
UN proper shipping name Aerosols, flammable
Transport hazard class(es)

Class 2.1
Subsidiary risk -
Label(s) 2.1
Packing group -
Environmental hazards -
Marine pollutant No
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions N82
Packaging exceptions 306
Packaging non bulk None
Packaging bulk None

IATA

UN number UN1950
UN proper shipping name Aerosols, flammable
Transport hazard class(es)

Class 2.1
Subsidiary risk -
Label(s) 2.1
Packing group -
Environmental hazards No
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN1950
UN proper shipping name Aerosols, flammable
Transport hazard class(es)

Class 2.1
Subsidiary risk -
Label(s) 2.1
Packing group -
Environmental hazards -
Marine pollutant No
EmS F-D, S-U
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.
15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Acetone (CAS 67-64-1) Listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical

- Classified hazard categories
  - Flammable (gases, aerosols, liquids, or solids)
  - Serious eye damage or eye irritation
  - Specific target organ toxicity (single or repeated exposure)
  - Hazard not otherwise classified (HNOC)

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)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number
Acetone (CAS 67-64-1) 6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))
Acetone (CAS 67-64-1) 35 %WV

DEA Exempt Chemical Mixtures Code Number
Acetone (CAS 67-64-1) 6532

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Acetone (CAS 67-64-1) Low priority

US state regulations

US. Massachusetts RTK - Substance List
Acetone (CAS 67-64-1)
Petroleum gases, liquefied; petroleum gas (CAS 68476-85-7)

US. New Jersey Worker and Community Right-to-Know Act
Acetone (CAS 67-64-1)
Petroleum gases, liquefied; petroleum gas (CAS 68476-85-7)

US. Pennsylvania Worker and Community Right-to-Know Law
Acetone (CAS 67-64-1)
Petroleum gases, liquefied; petroleum gas (CAS 68476-85-7)

US. Rhode Island RTK
Acetone (CAS 67-64-1)
Petroleum gases, liquefied; petroleum gas (CAS 68476-85-7)

California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.
### International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

- **Issue date**: 16-October-2014
- **Revision date**: 18-April-2018
- **Version #**: 03

- **HMIS® ratings**: Health: 2, Flammability: 4, Physical hazard: 0
- **NFPA ratings**: Not specified

**List of abbreviations**
- LD50: Lethal Dose, 50%.
- LC50: Lethal Concentration, 50%.
- NOEC: No observed effect concentration.

**Disclaimer**
The information in the sheet was written based on the best knowledge and experience currently available.

**This SDS contains revisions in the following section(s):** 2, 3, 6, 7, 8, 9, 10, 11, 12, 15.