

# SAFETY DATA SHEET

SDS NUMBER - GL12G1

## 1. Identification

**Product identifier** GAMELINE AEROSOL CLEAR  
**Other means of identification**  
**Product Code** GLAC1, GLAC12  
**Recommended use** Not available.  
**Manufacturer/Importer/Supplier/Distributor information**

MANUFACTURED FOR:  
PIONEER MANUFACTURING CO  
4529 INDUSTRIAL PKWY  
CLEVELAND, OH 44135  
PHONE NUMBER: 800-877-1500

**FOR CHEMICAL EMERGENCY**  
**Call INFOTRAC**  
**1-800-535-5053**  
**24 hours per day, 7 days per week**

## 2. Hazard(s) identification

|                              |                                                   |                             |
|------------------------------|---------------------------------------------------|-----------------------------|
| <b>Physical hazards</b>      | Flammable aerosols                                | Category 1                  |
|                              | Gases under pressure                              | Liquefied gas               |
| <b>Health hazards</b>        | Serious eye damage/eye irritation                 | Category 2A                 |
|                              | Specific target organ toxicity, single exposure   | Category 3 narcotic effects |
|                              | Specific target organ toxicity, repeated exposure | Category 2                  |
| <b>Environmental hazards</b> | Not classified.                                   |                             |
| <b>OSHA defined hazards</b>  | Not classified.                                   |                             |
| <b>Label elements</b>        |                                                   |                             |



**Signal word** Danger

**Hazard statement** Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.

### 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. Pressurized container: Do not pierce or burn, even after use. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection.

**Response** If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.

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

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

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

**Supplemental information** None.

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                            | Common name and synonyms | CAS number | %         |
|------------------------------------------|--------------------------|------------|-----------|
| DIMETHYL ETHER                           |                          | 115-10-6   | 30 to <40 |
| N-BUTYL ACETATE                          |                          | 123-86-4   | 20 to <30 |
| METHYL ETHYL KETONE                      |                          | 78-93-3    | 10 to <20 |
| DIACETONE ALCOHOL                        |                          | 123-42-2   | 5 to <10  |
| METHYL ACETATE                           |                          | 79-20-9    | 5 to <10  |
| PROPYLENE GLYCOL METHYL ETHER ACETATE    |                          | 108-65-6   | 1 to <5   |
| Other components below reportable levels |                          |            | 10 to <20 |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

|                                                                               |                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                                                             | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.                                                                   |
| <b>Skin contact</b>                                                           | Rinse skin with water/shower. Get medical attention if irritation develops and persists.                                                                                                                            |
| <b>Eye contact</b>                                                            | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.                 |
| <b>Ingestion</b>                                                              | Not likely, due to the form of the product. In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.                                                                          |
| <b>Most important symptoms/effects, acute and delayed</b>                     | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.                                                                                              |
| <b>General information</b>                                                    | If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.                           |

### 5. Fire-fighting measures

|                                                                      |                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>                                  | Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).                                                                                                                                                                                                                                                                                              |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                                                                                                                                                                                                                                                                                                                  |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.                                                                                                                                                                                                                                         |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.                                                                                                                                                                                                                        |
| <b>Fire fighting equipment/instructions</b>                          | In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| <b>Specific methods</b>                                              | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.                                                                                                                                                                    |
| <b>General fire hazards</b>                                          | Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.                                                                                                                                                                                                                                                                  |

### 6. Accidental release measures

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Methods and materials for containment and cleaning up**

Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

**Environmental precautions**

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.  
Avoid discharge into drains, water courses or onto the ground.

**7. Handling and storage****Precautions for safe handling**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. 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. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Level 2 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Stored containers should be periodically checked for general condition and leakage. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components                           | Type | Value                |
|--------------------------------------|------|----------------------|
| DIACETONE ALCOHOL<br>(CAS 123-42-2)  | PEL  | 240 mg/m3            |
| METHYL ACETATE (CAS<br>79-20-9)      | PEL  | 50 ppm<br>610 mg/m3  |
| METHYL ETHYL KETONE<br>(CAS 78-93-3) | PEL  | 200 ppm<br>590 mg/m3 |
| N-BUTYL ACETATE (CAS<br>123-86-4)    | PEL  | 200 ppm<br>710 mg/m3 |
|                                      |      | 150 ppm              |

**US. ACGIH Threshold Limit Values**

| Components                           | Type | Value   |
|--------------------------------------|------|---------|
| DIACETONE ALCOHOL<br>(CAS 123-42-2)  | TWA  | 50 ppm  |
| METHYL ACETATE (CAS<br>79-20-9)      | STEL | 250 ppm |
| METHYL ETHYL KETONE<br>(CAS 78-93-3) | TWA  | 200 ppm |
|                                      | STEL | 300 ppm |
| N-BUTYL ACETATE (CAS<br>123-86-4)    | TWA  | 200 ppm |
|                                      | STEL | 200 ppm |

**US. ACGIH Threshold Limit Values  
Components**

| Type | Value   |
|------|---------|
| TWA  | 150 ppm |

**US. NIOSH: Pocket Guide to Chemical Hazards  
Components**

| Type                                 | Value                                                                               |
|--------------------------------------|-------------------------------------------------------------------------------------|
| DIACETONE ALCOHOL<br>(CAS 123-42-2)  | TWA<br>240 mg/m <sup>3</sup>                                                        |
| METHYL ACETATE (CAS<br>79-20-9)      | STEL<br>50 ppm<br>760 mg/m <sup>3</sup>                                             |
| METHYL ETHYL KETONE<br>(CAS 78-93-3) | TWA<br>250 ppm<br>610 mg/m <sup>3</sup><br>STEL<br>200 ppm<br>885 mg/m <sup>3</sup> |
| N-BUTYL ACETATE (CAS<br>123-86-4)    | TWA<br>300 ppm<br>590 mg/m <sup>3</sup><br>STEL<br>200 ppm<br>950 mg/m <sup>3</sup> |
|                                      | TWA<br>200 ppm<br>710 mg/m <sup>3</sup><br>150 ppm                                  |

**US. Workplace Environmental Exposure Level (WEEL) Guides  
Components**

| Type                                                       | Value                         |
|------------------------------------------------------------|-------------------------------|
| DIMETHYL ETHER (CAS<br>115-10-6)                           | TWA<br>1880 mg/m <sup>3</sup> |
| PROPYLENE GLYCOL<br>METHYL ETHER ACETATE<br>(CAS 108-65-6) | TWA<br>1000 ppm<br>50 ppm     |

**Biological limit values****ACGIH Biological Exposure Indices**

| Components                           | Value  | Determinant | Specimen | Sampling Time |
|--------------------------------------|--------|-------------|----------|---------------|
| METHYL ETHYL KETONE<br>(CAS 78-93-3) | 2 mg/l | MEK         | Urine    | *             |

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

**Exposure guidelines****US - California OELs: Skin designation**

PROPYLENE GLYCOL METHYL ETHER ACETATE  
(CAS 108-65-6) Can be absorbed through the skin.

**Appropriate engineering  
controls**

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. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** For prolonged or repeated skin contact use suitable protective gloves.

**Other** Wear suitable protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**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**

|                |                         |
|----------------|-------------------------|
| Physical state | Liquid.                 |
| Form           | Aerosol. Liquefied gas. |
| Color          | Not available.          |

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point -222.7 °F (-141.5 °C) estimated

Initial boiling point and boiling range -12.68 °F (-24.82 °C) estimated

Flash point -42.0 °F (-41.1 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

**Upper/lower flammability or explosive limits**

Flammability limit - lower (%) 1.4 % estimated

Flammability limit - upper (%) 27 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 2576.89 hPa estimated

Vapor density Not available.

Relative density Not available.

**Solubility(ies)**

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature 662 °F (350 °C) estimated

Decomposition temperature Not available.

Viscosity Not available.

**Other information**

Density 11.98 lbs/gal estimated

Explosive properties Not explosive.

Flammability class Flammable IA estimated

Heat of combustion (NFPA 30B) 21.76 kJ/g estimated

Oxidizing properties Not oxidizing.

Percent volatile 100

Specific gravity 1.44 estimated

VOC 0 lbs/gal Regulatory  
0 g/l Regulatory

**10. Stability and reactivity**

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

Chemical stability Material is stable under normal conditions.

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

Conditions to avoid Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Nitrates. Ammonia. Amines. Isocyanates. Caustics.

Hazardous decomposition products No hazardous decomposition products are known.

**11. Toxicological information****Information on likely routes of exposure**

|                     |                                                                                                                                                  |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. |
| <b>Skin contact</b> | No adverse effects due to skin contact are expected.                                                                                             |
| <b>Eye contact</b>  | Causes serious eye irritation.                                                                                                                   |
| <b>Ingestion</b>    | Expected to be a low ingestion hazard.                                                                                                           |

**Symptoms related to the physical, chemical and toxicological characteristics**

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

**Information on toxicological effects**

**Acute toxicity** Narcotic effects.

| Components | Species | Test Results |
|------------|---------|--------------|
|------------|---------|--------------|

**DIACETONE ALCOHOL (CAS 123-42-2)****Acute****Dermal**

|      |        |            |
|------|--------|------------|
| LD50 | Rabbit | 14.5 ml/kg |
|------|--------|------------|

**Oral**

|      |     |        |
|------|-----|--------|
| LD50 | Rat | 4 g/kg |
|------|-----|--------|

**DIMETHYL ETHER (CAS 115-10-6)****Acute****Inhalation**

|      |       |                     |
|------|-------|---------------------|
| LC50 | Mouse | 494 ppm, 15 Minutes |
|      |       | 386 ppm, 30 Minutes |
|      | Rat   | 308.5 mg/l, 4 Hours |

**METHYL ACETATE (CAS 79-20-9)****Acute****Oral**

|      |        |          |
|------|--------|----------|
| LD50 | Rabbit | 3.7 g/kg |
|------|--------|----------|

**METHYL ETHYL KETONE (CAS 78-93-3)****Acute****Dermal**

|      |        |              |
|------|--------|--------------|
| LD50 | Rabbit | > 8000 mg/kg |
|------|--------|--------------|

**Inhalation**

|      |       |                       |
|------|-------|-----------------------|
| LC50 | Mouse | 11000 ppm, 45 Minutes |
|      | Rat   | 11700 ppm, 4 Hours    |

**Oral**

|      |       |                   |
|------|-------|-------------------|
| LD50 | Mouse | 670 mg/kg         |
|      | Rat   | 2300 - 3500 mg/kg |

**N-BUTYL ACETATE (CAS 123-86-4)****Acute****Inhalation**

|      |            |                   |
|------|------------|-------------------|
| LC50 | Wistar rat | 160 mg/l, 4 Hours |
|------|------------|-------------------|

**Oral**

|      |     |             |
|------|-----|-------------|
| LD50 | Rat | 14000 mg/kg |
|------|-----|-------------|

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Respiratory or skin sensitization****Respiratory sensitization** Not a respiratory sensitizer.**Skin sensitization** This product is not expected to cause skin sensitization.**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.**Specific target organ toxicity - single exposure** May cause drowsiness and dizziness.**Specific target organ toxicity - repeated exposure** May cause damage to organs through prolonged or repeated exposure.**Aspiration hazard** Not an aspiration hazard.**Chronic effects** May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.**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                               |      | Species                                            | Test Results               |
|------------------------------------------|------|----------------------------------------------------|----------------------------|
| <b>DIACETONE ALCOHOL (CAS 123-42-2)</b>  |      |                                                    |                            |
| <b>Aquatic</b>                           |      |                                                    |                            |
| Fish                                     | LC50 | Bluegill ( <i>Lepomis macrochirus</i> )            | 420 mg/l, 96 hours         |
| <b>METHYL ACETATE (CAS 79-20-9)</b>      |      |                                                    |                            |
| <b>Aquatic</b>                           |      |                                                    |                            |
| Fish                                     | LC50 | Fathead minnow ( <i>Pimephales promelas</i> )      | 295 - 348 mg/l, 96 hours   |
| <b>METHYL ETHYL KETONE (CAS 78-93-3)</b> |      |                                                    |                            |
| <b>Aquatic</b>                           |      |                                                    |                            |
| Crustacea                                | EC50 | Water flea ( <i>Daphnia magna</i> )                | 4025 - 6440 mg/l, 48 hours |
| Fish                                     | LC50 | Sheepshead minnow ( <i>Cyprinodon variegatus</i> ) | > 400 mg/l, 96 hours       |
| <b>N-BUTYL ACETATE (CAS 123-86-4)</b>    |      |                                                    |                            |
| <b>Aquatic</b>                           |      |                                                    |                            |
| Fish                                     | LC50 | Fathead minnow ( <i>Pimephales promelas</i> )      | 17 - 19 mg/l, 96 hours     |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.**Bioaccumulative potential****Partition coefficient n-octanol / water (log Kow)**

|                     |        |
|---------------------|--------|
| DIACETONE ALCOHOL   | -0.098 |
| DIMETHYL ETHER      | 0.1    |
| METHYL ACETATE      | 0.18   |
| METHYL ETHYL KETONE | 0.29   |
| N-BUTYL ACETATE     | 1.78   |

**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**

|                                              |                                                                                                                                                                                                                                                         |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.                                                                                                                                                                                                  |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.                                                                                                                                          |
| <b>Waste from residues / unused products</b> | 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).                                        |
| <b>Contaminated packaging</b>                | 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. Do not re-use empty containers.              |

**14. Transport information****DOT**

|                                     |                                                                         |
|-------------------------------------|-------------------------------------------------------------------------|
| <b>UN number</b>                    | UN1950                                                                  |
| <b>UN proper shipping name</b>      | UN1950, Aerosols, Flammable                                             |
| <b>Transport hazard class(es)</b>   |                                                                         |
| <b>Class</b>                        | 2.1                                                                     |
| <b>Subsidiary risk</b>              | -                                                                       |
| <b>Label(s)</b>                     | 2.1                                                                     |
| <b>Packing group</b>                | Not applicable.                                                         |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | N82                                                                     |
| <b>Packaging exceptions</b>         | 306                                                                     |
| <b>Packaging non bulk</b>           | None                                                                    |
| <b>Packaging bulk</b>               | None                                                                    |

**IATA**

|                                     |                                                                         |
|-------------------------------------|-------------------------------------------------------------------------|
| <b>UN number</b>                    | UN1950                                                                  |
| <b>UN proper shipping name</b>      | Aerosols, Flammable                                                     |
| <b>Transport hazard class(es)</b>   |                                                                         |
| <b>Class</b>                        | 2.1                                                                     |
| <b>Subsidiary risk</b>              | -                                                                       |
| <b>Label(s)</b>                     | 2.1                                                                     |
| <b>Packing group</b>                | Not applicable.                                                         |
| <b>Environmental hazards</b>        | No.                                                                     |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |                                                                         |
| <b>Passenger and cargo aircraft</b> | Allowed.                                                                |
| <b>Cargo aircraft only</b>          | Allowed.                                                                |

**IMDG**

|                                                                                 |                                                                         |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>UN number</b>                                                                | UN1950                                                                  |
| <b>UN proper shipping name</b>                                                  | Aerosols, Flammable                                                     |
| <b>Transport hazard class(es)</b>                                               |                                                                         |
| <b>Class</b>                                                                    | 2.1                                                                     |
| <b>Subsidiary risk</b>                                                          | -                                                                       |
| <b>Label(s)</b>                                                                 | 2.1                                                                     |
| <b>Packing group</b>                                                            | Not applicable.                                                         |
| <b>Environmental hazards</b>                                                    |                                                                         |
| <b>Marine pollutant</b>                                                         | No.                                                                     |
| <b>EmS</b>                                                                      | Not available.                                                          |
| <b>Special precautions for user</b>                                             | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not established.                                                        |

DOT



IATA; IMDG

**General information**

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

**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)**

|                                   |         |
|-----------------------------------|---------|
| DIMETHYL ETHER (CAS 115-10-6)     | Listed. |
| METHYL ACETATE (CAS 79-20-9)      | Listed. |
| METHYL ETHYL KETONE (CAS 78-93-3) | Listed. |
| N-BUTYL ACETATE (CAS 123-86-4)    | Listed. |

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

|                          |                        |
|--------------------------|------------------------|
| <b>Hazard categories</b> | Immediate Hazard - Yes |
|                          | Delayed Hazard - Yes   |
|                          | Fire Hazard - Yes      |
|                          | Pressure Hazard - No   |
|                          | Reactivity Hazard - No |

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**      No

**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)**

DIMETHYL ETHER (CAS 115-10-6)

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

METHYL ETHYL KETONE (CAS 78-93-3) 6714

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

METHYL ETHYL KETONE (CAS 78-93-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

METHYL ETHYL KETONE (CAS 78-93-3) 6714

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

METHYL ACETATE (CAS 79-20-9) Low priority

METHYL ETHYL KETONE (CAS 78-93-3) Low priority

N-BUTYL ACETATE (CAS 123-86-4) Low priority

#### US state regulations

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

METHYL ETHYL KETONE (CAS 78-93-3)

**US. Massachusetts RTK - Substance List**

DIACETONE ALCOHOL (CAS 123-42-2)

DIMETHYL ETHER (CAS 115-10-6)

METHYL ACETATE (CAS 79-20-9)

METHYL ETHYL KETONE (CAS 78-93-3)

N-BUTYL ACETATE (CAS 123-86-4)

**US. New Jersey Worker and Community Right-to-Know Act**

DIACETONE ALCOHOL (CAS 123-42-2)

DIMETHYL ETHER (CAS 115-10-6)

METHYL ACETATE (CAS 79-20-9)

METHYL ETHYL KETONE (CAS 78-93-3)

N-BUTYL ACETATE (CAS 123-86-4)

**US. Pennsylvania Worker and Community Right-to-Know Law**

DIACETONE ALCOHOL (CAS 123-42-2)

DIMETHYL ETHER (CAS 115-10-6)

METHYL ACETATE (CAS 79-20-9)

METHYL ETHYL KETONE (CAS 78-93-3)

N-BUTYL ACETATE (CAS 123-86-4)

**US. Rhode Island RTK**

DIMETHYL ETHER (CAS 115-10-6)

METHYL ETHYL KETONE (CAS 78-93-3)

N-BUTYL ACETATE (CAS 123-86-4)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

#### International Inventories

| Country(s) or region | Inventory name                                                         | On inventory (yes/no)* |
|----------------------|------------------------------------------------------------------------|------------------------|
| Australia            | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada               | Domestic Substances List (DSL)                                         | No                     |
| Canada               | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe               | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe               | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                | Existing Chemicals List (ECL)                                          | No                     |
| New Zealand          | New Zealand Inventory                                                  | No                     |
| Philippines          | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |

| Country(s) or region        | Inventory name                                | On inventory (yes/no)* |
|-----------------------------|-----------------------------------------------|------------------------|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No                     |

\*A "Yes" indicates that all components of this product comply 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** 07-01-2017

**Version #** 01

**HMIS® ratings** Health: 2\*  
Flammability: 4  
Physical hazard: 0

**NFPA ratings** Health: 2  
Flammability: 4  
Instability: 0

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