FlawGlo®

# MATERIAL SAFETY DATA SHEET OF BMI 106

## 1. Identification of the Product and the Company:

| | | |
|---|---|---|
| Product Identifier | : | BMI 106 |
| Use of the product | : | Industrial Use |
| Manufacturer and Supplier | : | Arora Technologies (P) Limited |
| Address | : | Plot No. D-183/8, MIDC, TTC Nerul, Navi Mumbai- 400706, Maharashtra, India |
| Telephone No. | : | T: +91-22-6138 0600 |
| E-mail | : | E: info@arorandt.com \| W: www.arorandt.com |

## 2. Hazard Identification:

| | | | |
|---|---|---|---|
| Physical hazards | : | Flammable aerosols | Category 1 |
| | : | Gases under pressure | Compressed Gas |
| Health hazards | : | Specific target organ toxicity (single exposure) | Category 3 Narcotic effects |
| | | Aspiration hazard | Category 1 |
| Environmental Hazards | : | Hazardous due to aquatic enviroment, acute hazard | Category 2 |
| OSHA defined hazards | : | Not Classified | |
| Label elements | : |  | |
| Signal word | : | Danger | |
| Hazard statement | : | Extremely flammable aerosol. Contains gas under pressure. May explode if heated. May be fatal if swallowed and enters airways. | |
| Precautionary statement | | | |
| Prevention | : | Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open Flame. Pressurized container: Do not pierce or burn, even after use. Avoid breathing most or vapor. | |
| Response | : | If swallowed: Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. Do not induce vomit. | |
| Storage | : | Store in well ventilated place. Keep container tightly closed. protect from sun. | |
| Disposal | : | Dispose of contents/container in accordance with local/ regional/ national/ international regulations. | |
| Hazard(s) not otherwise classified (HNOC) | : | Not classified. | |

## 3. Composition/information on ingredients

| Chemical name | CAS number | % |
|---|---|---|
| Distillates(petroleum) Hydro treated Light | 64747-47-2 | >95 |
| Carbon dioxide | 124-38-9 | <5 |

## 4. First-aid measures

| | | |
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| Inhalation | : | Move to fresh air. Call a physician if symptoms develop or persist. |
| Skin contact | : | Wash off with soap and water. Get medical attention if irritation develops and persists. |
| Eye contact | : | Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists. |
| Ingestion | : | Get medical attention immediately, Rinse mouth. Do not induce vomiting. |
| Most important symptoms/effects, acute and delayed | : | Dust may cause eye, skin and respiratory tract irritation. Diarrhea. May cause drowsiness and dizziness. Irritation of eyes, nose and throat. skin Irritation. |
| Indication of immediate medical attention and special treatment needed | : | Provide general supportive measures and treat symptomatically. |
| General information | : | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

## 5. Firefighting Measures:

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| Suitable extinguishing media | : | Water fog. Foam. Dry chemical powder. Carbon dioxide (Co2). |
| Unsuitable extinguishing media | : | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | : | Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | : | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire-fighting equipment/instructions | : | Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. |
| Specific methods | : | Move containers from fire area if you can do so without risk. |
| General fire hazards | : | Extremely flammable aerosol. |

## 6. Accidental release measures:

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| Personal precautions, protective equipment and emergency procedures | : | Keep unnecessary personnel away. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Use only non-sparking tools. Wear appropriate personal protective equipment. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | : | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. The product is immiscible with water and will spread on the water surface. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. 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.<br>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 |
| Environmental precautions | : | Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Inform appropriate managerial or supervisory personnel of all environmental releases |

## 7. Handling and storage:

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| Precautions for safe handling | : | Pressurised containers: Do not pierce or burn even after use. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Explosion proof exhaust ventilation is recommended. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid prolonged exposure. |
| Conditions for safe storage, including any incompatibilities | : | Level 1 Aerosol.<br>Do not handle or store near an open flame, heat or other sources of ignition. Do not puncture, incinerate or crush. Store away from incompatible materials (see Section 10 of the SDS). Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. |

## 8. Exposure controls/personal protection:

Occupational exposure limits

**US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components | Type | Value |
|---|---|---|
| Carbon dioxide (CAS 124-38-9) | PEL | 5000 ppm |

**US ACGIH Threshold Limit Values**

| Components | Type | Value |
|---|---|---|
| Carbon dioxide (CAS 124-38-9) | STEL | 30000 ppm |
| | TWA | 5000 ppm |

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

| Components | Type | Value |
|---|---|---|
| Carbon dioxide (CAS124-38-9) | STEL | 30000 ppm |
| | TWA | 5000 ppm |
| Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8) | TWA | 100 ppm |

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| Biological limit values | : | No biological exposure limits noted for the ingredient(s). |
| Exposure guidelines | : | No exposure standards allocated. |
| Appropriate engineering controls | : | Explosion-proof general and local exhaust ventilation. 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. |

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

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|---|---|---|
| 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 | : | Chemical respirator with organic vapor cartridge and full facepiece. |
| Thermal hazards | : | Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | : | When using, do not eat, drink or 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 of active component

| | | |
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| Appearance | : | Black liquid |
| Physical state | : | Liquid |
| Form | : | Aerosol |
| Color | : | Dark green |
| Odour | : | Slight Petroleum Odour |
| Odor threshold | : | Not available. |
| pH | : | Not available. |
| Melting point/freezing point | : | <-68°C, <-90°F. |
| Initial boiling point and boiling range | : | 239-276 °C, 464-528 °F. |
| Flash point | : | 99°C, 210°F. |
| Evaporation rate | : | Not relevant. |
| Flammability (solid, gas) | : | Not available. |
| Upper/lower flammability or explosive limits | | |
| Flammability limit – lower (%) | : | 1.2% |
| Flammability limit – upper (%) | : | 6% |
| Explosive limit – lower (%) | : | Not available. |
| Explosive limit – upper (%) | : | Not available. |
| Vapor pressure | : | Not relevant. |
| Vapor density | : | Not relevant. |
| Relative gravity | : | 0.825 |
| Solubility(ies) | | |
| Solubility (water) | : | Insoluble in water. |
| Partition coefficient (n-octanol/water) | : | Not relevant. |
| Auto-ignition temperature | : | 216 °C (421°F) |
| Decomposition temperature | : | Not available. |
| Viscosity | : | 4.1 cSt @ 20 °C (68 °F) |
| VOC (Weight %) | : | 815-821 g/l. |

## 10. Stability and reactivity

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| 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 | : Avoid temperatures exceeding the flash point. Contact with incompatible materials. Avoid temperatures above 122 °F (50 °C). |
| Incompatible materials | : Strong oxidizing agents |
| Hazardous decomposition products | : No hazardous decomposition products are known. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
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| Ingestion | : Expected to be a low ingestion hazard. |
| Inhalation | : Inhalation of dusts may cause respiratory irritation. |
| Skin contact | : Dust or powder may irritate the skin. |
| Eye contact | : Dust may irritate the eyes. |
| Symptoms related to the physical, chemical and toxicological characteristics | : Dust may cause eye, skin and respiratory tract irritation, Diarrhea. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Irritation of eyes and mucous membranes. Skin irritation. High concentrations: Inhalation of propellant may cause respiratory irritation, dizziness, nausea, or drowsiness. |

**Information on toxicological effects**

| | |
|---|---|
| Acute toxicity | May be fatal if swallowed and enters airways. Narcotic effects. |
| Skin corrosion/irritation | : Prolonged skin contact may cause temporary irritation. |
| Serious eye damage/eye irritation | : Direct contact with eyes may cause temporary irritation. |
| 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. |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. |
| Specific target organ toxicity – single exposure | : Not classified. : |
| Aspiration hazard | Not an aspiration hazard. |
| Chronic effects | : Prolonged inhalation may be harmful. |

## 12. Ecological information:

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|---|---|
| Ecotoxicity | : Toxic to aquatic organisms. |
| Persistence and degradability | : No data is available on the degradability of this product. |
| Bioaccumulative potential | : No data available for this product. |
| Mobility in soil | : Not 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:

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|---|---|
| Disposal instructions | : 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. |
| 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). |

## 14. Transport Information:

**DOT**

| | |
|---|---|
| UN number | : Un1950 |
| UN proper shipping name | : Aerosols |
| Transport hazard class(es) | : 2.1 |
| Subsidiary classes | : - |

| | |
|---|---|
| Label(s) | : Limited Quantity, Class 2.1 |
| Packing group | : Y203 |
| Special precautions for user | : Read safety instructions, SDS and emergency procedures before handling. |
| Packaging exceptions | : 306 |
| Packaging non bulk | : None. |
| Packaging bulk | : None |

**IATA**

| | |
|---|---|
| UN number | : Un1950 |
| UN proper shipping name | : Aerosols |
| Transport hazard class(es) | : 2.1 |
| Subsidiary classes | : - |
| Label(s) | : Limited Quantity, Class 2.1 |
| Packing group | : Y203 |
| Environmental hazards | : No. |
| ERG Code | : 10L |
| Special precautions for user | : Read safety instructions, SDS and emergency procedures before handling. |

**IMDG**

| | |
|---|---|
| UN number | : Un1950 |
| UN proper shipping name | : Aerosols |
| Transport hazard class(es) | : 2.1 |
| Subsidiary classes | : - |
| Label(s) | : Limited Quantity, Class 2.1 |
| Packing group | : Not applicable |
| Environmental hazards | |
| Marine pollutant | : No. |
| EmS | : Not available |
| 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 established |

## 15. Other information:

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| Further information<br>HMIS® Ratings | : Health: 2<br>Flammability: 2<br>Physical Hazard: 0 |
| NFPA Rating | :  |
| List of abbreviations | : LD50: Lethal Dose, 50%.<br>PEL: Permissible exposure limit.<br>STEL: Short term exposure limit.<br>TWA: Time weighted average. |
| References | : HSDB® - Hazardous Substances Data Bank |







ARORA
Arora Technologies (P) Limited
Plot No. D-183/8, MIDC, TTC Nerul, Navi Mumbai, Maharashtra 400706, India
T: +91 22 6138 0600 | E: info@arorandt.com | W: www.arorandt.com