# **Material Safety Data Sheet**



MegaClean

### 1. Product and company identification

| Common name                 | : MegaClean - #MC1-Q, #MC1-G, #MC1-5G, #MC1-55G, and #MC1-C20  |
|-----------------------------|--|
| Trade name<br>Material uses | <ul><li>Homogeneous solution.</li><li>Cleaner for removing heavy residues.</li></ul>                       |
| Supplier/Manufacturer       | : Micronova Manufacturing Inc.<br>3431 West Lomita Boulevard<br>Torrance, CA 90505<br>Tel : (310) 784-6990 |
| In case of emergency        | : CHEMTREC, U.S. : (800) 424-9300 International: (703) 527-3887  |

#### 2. Hazards identification

| Physical state  | : Liquid.   |
|---|---|
| Odor  | : Lemon-like.   |
| Color   | : Clear.  |
| Hazard status   | : This material is classified as hazardous under OSHA regulations.  |
| Emergency overview                                    | : WARNING !   |
|   | CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.  |
|   | Irritating to eyes, respiratory system and skin. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling. |
| Potential acute health effects                        |   |
| Eyes  | : Irritating to eyes.   |
| Skin  | : Irritating to skin.   |
| Inhalation  | : Irritating to respiratory system.   |
| Ingestion   | : No known significant effects or critical hazards.   |
| Potential chronic health effects                      | <ul> <li>Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.<br/>Mutagenic effects: Not available.<br/>Teratogenic effects: Not available.</li> </ul>  |
| Medical conditions<br>aggravated by over-<br>exposure | : None known.   |

See toxicological information (section 11)

# 3. Composition/information on ingredients

| United   | States  |
|--|---|
| Name   | CAS number %                                      |
| Dipropylene glycol butyl ether<br>Diethylene glycol butyl ether<br>Nonylphenol polyethylene glycol ether | 29911-28-230 - 60112-34-530 - 60127087-87-01 - 10 |

MANUFACTURING INC.

#### 4. First aid measures

| Eye contact        | Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur. |  |  |
|--------------------|---|--|--|
| Skin contact       | : Wash with soap and water. Get medical attention if symptoms occur.  |  |  |
| Inhalation         | : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.                             |  |  |
| Ingestion          | : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.                              |  |  |
| Notes to physician | : No specific antidote. Medical staff must contact Poison Control Center.   |  |  |

#### 5. Fire-fighting measures

| Flammability of the product                    | : May be combustible at high temperature.   |  |  |  |
|--|---|--|--|--|
| Products of combustion                         | <ul> <li>Decomposition products may include the following materials:<br/>carbon oxides</li> </ul>   |  |  |  |
| Extinguishing media                            |   |  |  |  |
| Suitable                                       | : Use an extinguishing agent suitable for the surrounding fire.   |  |  |  |
| Not suitable                                   | : None known.   |  |  |  |
| Special exposure hazards                       | : In a fire or if heated, a pressure increase will occur and the container may burst.   |  |  |  |
| Special protective equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |  |  |  |

### 6. Accidental release measures

| Personal precautions      | : | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).  |
|---------------------------|---|---|
| Environmental precautions | : | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).   |
| Methods for cleaning up   | : | Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal. |

### 7. Handling and storage

Handling

: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.



Storage

9

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

smoking and using the lavatory and at the end of the day. Follow good industrial hygiene

#### 8. Exposure controls/personal protection

#### Consult local authorities for acceptable exposure limits.

| Engineering measures                         | : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. |
|--|--|
| Eyes   | : Safety glasses.  |
| Skin   | : Lab coat.  |
| Respiratory                                  | : A respirator is not needed under normal and intended conditions of use.  |
| Hands  | : Natural rubber (latex).  |
|  |  |
| HMIS Code/Personal<br>protective equipment   | : B  |
| Personal protection in case of a large spill | : Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear NIOSH-<br>approved self-contained breathing apparatus or equivalent and full protective gear.  |
| Hygiene measures                             | : Wash hands, forearms and face thoroughly after handling compounds and before eating,   |

Physical and chemical properties

| Physical state                    | : Liquid.  |
|-----------------------------------|--|
| Flash point                       | : Open cup: >93°C (>199.4°F) [Cleveland.]                              |
| Auto-ignition temperature         | : 228°C (442.4°F)  |
| Color                             | : Clear.   |
| Odor                              | : Lemon-like.  |
| рН                                | : 7.95   |
| <b>Boiling/condensation point</b> | : 220°C (428°F)  |
| Relative density                  | : 0.936  |
| Vapor pressure                    | : 0.0027 kPa (0.02 mm Hg)  |
| Volatility                        | : 97% (w/w)  |
| VOC                               | : 97 (%)   |
| Solubility                        | : Easily soluble in the following materials: cold water and hot water. |
|                                   |  |



#### 10. Stability and reactivity

| Stability and reactivity                | : The product is stable.   |
|---|--|
| Incompatibility with various substances | : Reactive or incompatible with the following materials: oxidizing materials.  |
| Hazardous decomposition<br>products     | : Under normal conditions of storage and use, hazardous decomposition products should not be produced.                   |
| Hazardous polymerization                | : Will not occur.  |
| Conditions of reactivity                | : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. |

Non-flammable in the presence of the following materials or conditions: heat.

#### 11. Toxicological information

| Toxicity data                  |  |         |            |  |  |
|--------------------------------|--|---------|------------|--|--|
| Product/ingredient name        | Test / Route                                       | Species | Result     |  |  |
| Dipropylene glycol butyl ether | LD50 Dermal  | Rabbit  | 5860 uL/kg |  |  |
|                                | LD50 Oral  | Rat     | 1620 uL/kg |  |  |
| Diethylene glycol butyl ether  | LD50 Dermal  | Rabbit  | 2700 mg/kg |  |  |
| , , ,                          | LD50 Oral  | Rat     | 5660 mg/kg |  |  |
|                                | LD50 Oral  | Rat     | 4500 mg/kg |  |  |
|                                | LD50 Unreported                                    | Rat     | 4500 mg/kg |  |  |
| Acute Effects                  |  |         |            |  |  |
| Eyes                           | : Irritating to eyes.                              |         |            |  |  |
| Skin                           | : Irritating to skin.                              |         |            |  |  |
| Inhalation                     | : Irritating to respiratory system.                |         |            |  |  |
| Indestion                      | : No known significant effects or critical hazards |         |            |  |  |

Ingestion Potential chronic health effects No known significant effects or critical hazards.
Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH. Mutagenic effects: Not available. Teratogenic effects: Not available.

### 12. Ecological information

| Ecotoxicity data  |                              |                          |                      |                                |  |
|---|------------------------------|--------------------------|----------------------|--------------------------------|--|
| Product/ingredient name<br>Diethylene glycol butyl ether                      | <mark>Species</mark><br>Fish | <b>Test</b><br>Mortality | Exposure<br>96 hours | Result<br>Acute LC50 1300 mg/L |  |
| Environmental precautions : No known significant effects or critical hazards. |                              |                          |                      |                                |  |

Products of degradation

: Products of degradation: carbon oxides (CO, CO<sub>2</sub>) and water.

#### 13. Disposal considerations

Waste disposal

: The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



# 14. Transport information

#### **Regulatory information**

UN/ IMDG/ IATA DOT : Not regulated.

| 15. Regulatory in  | ormation   |                          |   |                     |  |  |
|--|--|--------------------------|---|---------------------|--|--|
| United States  |  |                          |   |                     |  |  |
| HCS Classification   | : Irritating material  |                          |   |                     |  |  |
| U.S. Federal regulations : TSCA 8(a) PAIR: Dipropylene glycol butyl ether; Nonylphenol polyeth<br>United States inventory (TSCA 8b): All components are listed or ex |  |                          |   |                     |  |  |
|  | SARA 302/304/311/312 extremely hazardous substances: No products were found.<br>SARA 302/304 emergency planning and notification: No products were found.<br>SARA 302/304/311/312 hazardous chemicals: Diethylene glycol butyl ether<br>SARA 311/312 MSDS distribution - chemical inventory - hazard identification:<br>Diethylene glycol butyl ether: Fire hazard, Immediate (acute) health hazard  |                          |   |                     |  |  |
|  | ts were found.   |                          |   |                     |  |  |
|  | Clean Water Ac   | t (CWA) 311: No produc   | ts were found.  |                     |  |  |
|  | Clean Air Act (C   | CAA) 112 accidental rele | ease prevention: No produ                                     | cts were found.     |  |  |
|  | •  |                          | mable substances: No pro<br>c substances: No products         |                     |  |  |
| SARA 313   |  |                          |   |                     |  |  |
|  | Product name   |                          | CAS number  | Concentration       |  |  |
| Form R - Reporting<br>requirements   | : Diethylene glyco   | l butyl ether            | 112-34-5  | 30 - 60             |  |  |
| Supplier notification  | : Diethylene glyco   | l butyl ether            | 112-34-5  | 30 - 60             |  |  |
|  |  |                          | pying and redistribution of th<br>ISDS subsequently redistrib |                     |  |  |
| State regulations  | <ul> <li>Connecticut Carcinogen Reporting: None of the components are listed.</li> <li>Connecticut Hazardous Material Survey: None of the components are listed.</li> <li>Florida substances: None of the components are listed.</li> <li>Illinois Chemical Safety Act: None of the components are listed.</li> <li>Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.</li> <li>Louisiana Reporting: None of the components are listed.</li> </ul> |                          |   |                     |  |  |
|  |  | None of the component    |   |                     |  |  |
|  |  | Spill: None of the comp  |   |                     |  |  |
|  | Massachusetts  | Substances: None of th   | ne components are listed.                                     |                     |  |  |
|  |  | al Material: None of the |   | at a d              |  |  |
|  |  |                          | ne of the components are li<br>lone of the components are     |                     |  |  |
|  |  | ill: None of the compone |   | iisteu.             |  |  |
|  |  |                          | ntion Act: None of the comp                                   | oonents are listed. |  |  |
|  |  |                          | ces: None of the component                                    |                     |  |  |
|  |  |                          | porting: None of the compo                                    |                     |  |  |
|  | Pennsylvania RTK Hazardous Substances: None of the components are listed.<br>Rhode Island Hazardous Substances: None of the components are listed.   |                          |   |                     |  |  |

California prop. 65: No products were found.

| MAINLEACTURING INC.  |  | MegaClea   |
|--|--|--|
| International lists  | : This product, (and its ingredients) is (are) listed<br>exempted from being listed, in Australia (AICS),<br>(TCCL), in Japan (METI), in the Philippines (RA   | in Europe (EINECS/ELINCS), in Korea  |
| 16. Other information of the other information | ition  |  |
| Label requirements (U.S.A.)  | : CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.   |  |
| Hazardous Material<br>Information System (U.S.A.)  | : HMIS RATING<br>Health * 1<br>Fire hazard 1<br>Physical Hazard 0<br>Personal protection B   | HAZARD RATINGS<br>4- Extreme<br>3- Serious<br>2- Moderate<br>1- Slight<br>0- Minimal<br>See section 8 for more detailed<br>information on personal protection. |
| National Fire Protection<br>Association (U.S.A.)   | :<br>Health<br>Health<br>Flammability<br>Reactivity<br>Special   |  |
| References   | <ul> <li>ANSI Z400.1, MSDS Standard, 2004 Manufacturer's Material Safety Data Sheet<br/>29CFR Part1910.1200 OSHA MSDS Requirements 49CFR Table List of Hazardous<br/>Materials, UN#, Proper Shipping Names, PG.</li> </ul> |  |
| Date of issue<br>Version   | : 03/31/2007<br>: 1  |  |
| Notice to reader   | the information contained berein is accurate.  |  |

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