# SAFETY DATA SHEET (SDS)



Jacquard Products Manufactured by Rupert, Gibbon & Spider, Inc. P.O. Box 425 | Healdsburg, CA 95448 800.442.0455 | Fax: 707.433.4906 www.jacquardproducts.com

#### Revision Date: 04/23/2018

## SECTION I - CHEMICAL, PRODUCT & COMPANY INFORMATION

| Product Name:        | <b>PIÑATA ALCOHOL INK &amp; CLARO EXTENDER</b>  |                                  |  |
|----------------------|---|----------------------------------|--|
| Product Number/Code: | 002-031 (STANDARD COLORS), JFC1001, JFC2001   |                                  |  |
| Recommended Use:     | Ink & ink medium for hard surfaces  |                                  |  |
| Restrictions on use: | None known  |                                  |  |
| Manufacturer:        | Rupert, Gibbon & Spider, Inc.<br>I 147 Healdsburg Ave.<br>Healdsburg, CA 95448<br>I-800-442-0455 / 707-433-9577 |                                  |  |
| Emergency Number:    | nergency Number: ChemTel, Inc Contract #MIS9128344  |                                  |  |
|                      | North America:<br>I-800-255-3924  | International:<br>I-8I3-248-0585 |  |

## SECTION 2 - HAZARD(S) IDENTIFICATION

| GHS classification in accordance with | n 29 CFR 1910 (OSHA HCS)   |             |
|---------------------------------------|--|-------------|
| Toxicological Data on Ingredients:    |  |             |
| Hazard Classification                 |  |             |
| Physical Hazards:                     | Flammable liquids  | Category 2  |
| Health Hazards:                       | Acute toxicity, oral   | Category 4  |
|                                       | Skin Irritant  | Category 2  |
|                                       | Eye Irritant   | Category 2A |
| Environmental Hazards:                | Not classified   |             |
| Label Elements                        |  |             |
| Pictogram:                            |  |             |
| Signal Words:                         | DANGER, WARNING  |             |
| Hazard Statements-EU:                 | H225 Highly flammable liquid and vapo<br>H302 Harmful if swallowed.<br>H315 Causes skin irritation.<br>H319 Causes serious eye irritation. | r.          |

| Prevention:                         | P210 Keep away from heat/sparks/open flames/hot surfaces No smoking.  |
|-------------------------------------|---|
|                                     | P233 Keep container tightly closed.   |
|                                     | P240 Ground/bond container and receiving equipment.   |
|                                     | P241 Use explosion-proof electrical/ventilating/lighting/equipment.   |
|                                     | P242 Use only non-sparking tools.   |
|                                     | P243 Take precautionary measures against static discharge.  |
|                                     | P260 Do not breathe mist/vapors/spray.  |
|                                     | P264 Wash thoroughly after handling.  |
|                                     | P270 Do not eat, drink or smoke when using this product.  |
|                                     | P280 Wear protective gloves/protective clothing/eye protection.   |
| Response:                           | P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.<br>P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.<br>P302+P352 |
|                                     | P303+P361+P353 If on skin (or hair): Take off immediately all contaminat-   |
|                                     | ed clothing. Rinse skin with water/shower.  |
|                                     | P304+P340 IF INHALED: Remove person to fresh air and keep comfort-  |
|                                     | able for breathing.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several min-  |
|                                     | utes. Remove contact lenses, if present and easy to do. Continue rinsing.   |
|                                     | P310 Immediately call a poison center/doctor.   |
|                                     | P321 Specific treatment (see product label).  |
|                                     | P332+P313 IF SKIN irritation occurs: Get medical advice/attention.  |
|                                     | P337+P313 If eye irritation persists: Get medical advice/attention.   |
|                                     | P362 Take off contaminated clothing and wash before reuse.  |
|                                     | P363 Wash contaminated clothing before reuse.   |
|                                     | P370+P378 In case of fire: Use for extinction: CO2, powder or water spray   |
| Storage:                            | P403+P235 Store in a well-ventilated place. Keep cool.  |
| Disposal:                           | P501 Dispose of contents/container in accordance with local/regional/<br>national/international regulations.  |
| Hazard(s) not otherwise classified: | There are no other hazards not otherwise classified that have been identified.  |

## SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical identity  | Content in percent (%)*                            | CAS #     |
|--|--|-----------|
| Ethanol  | 50-70%   | 64-17-5   |
| 2-(propyloxy)ethanol                                     | 10-20%   | 2807-30-9 |
| propan-I-ol  | <10%   | 71-23-8   |
| isopropyl acetate  | <10%   | 108-21-4  |
| Basic yellow 37  | ≤ 5%   | 6358-36-7 |
| Nitrocellulose, colloided, granular                      | ≤ 5%   | 9004-70-0 |
| Basic Blue 7   | ≤ 5%   | 2390-60-5 |
| Propan-2-ol  | ≤ 5%   | 67-63-0   |
| For the listed ingredient(s) the identity and/or exact t | percentage(s) are being withheld as a trade secret |           |

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

## SECTION 4 - FIRST AID MEASURES

| Description of first aid measures:  |   |
|---|---|
| In the event of skin contact:   | Immediately remove any clothing soiled by the product. Immediately wash with water and soap and rinse thoroughly. If skin irritation or rash occurs: Get medical advice/attention.                        |
| In the event of eye contact:  | Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.   |
| In the event of swallowing:   | Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help.  |
| In the event of exposure by inhalation:                                     | Supply fresh air; consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing.   |
| Most important symptoms and effects, acute and delayed:                     | Irritating to eyes and skin. Coughing, dizziness, if inhaled. Breathing diffi-<br>culty. May cause gastrointestinal irritation if ingested. Nausea in case of<br>ingestion. DANGER: Harmful if swallowed. |
| Indication of any immediate medical attention and special treatment needed: | Treat symptomatically.  |

### SECTION 5 - FIREFIGHTING MEASURES

| Suitable extinguishing media:                          | CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.   |
|--|--|
| Unsuitable extinguishing media:                        | Water stream   |
| Special hazards arising from the substance or mixture: | Formation of toxic gases is possible during heating or in case of fire.  |
| Advice for fire fighters:                              | Protective equipment: Wear self-contained respiratory protective device.<br>Wear fully protective suit.<br>Additional information: Eliminate all ignition sources if safe to do so. Cool<br>endangered receptacles with water spray. |

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures: | Ensure adequate ventilation. Use personal protective equipment as re-<br>quired. Keep away from ignition sources. Protect from heat                                 |
|--|---|
| Methods and material for containment and clean up:                   | Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Dispose of the collected material according to regulations. |
| Environmental procedures:  | Avoid release to the environment. Inform respective authorities in case of seepage into water course or sewage system.  |
| Reference to other sections:   | See Section 7 for information on safe handling.<br>See Section 8 for information on personal protection equipment.<br>See Section 13 for disposal information.      |

## SECTION 7 - HANDLING AND STORAGE

| Precautions for safe handling:                               | Use only in well ventilated areas. Avoid splashes or spray in enclosed areas. Keep out of reach of children.   |  |  |
|--|--|--|--|
| Information about protection against explosions and fires:   | Highly flammable liquid and vapor. Keep ignition sources away - Do not smoke. Protect against electrostatic charges.   |  |  |
| Conditions for safe storage including any incompatibilities: | <ul> <li>Requirements to be met by storerooms and receptacles:</li> <li>Avoid storage near extreme heat, ignition sources or open flame.</li> <li>Store in cool, dry conditions in well sealed receptacles.</li> <li>Information about storage in one common storage facility:</li> <li>Store away from foodstuffs.</li> <li>Store away from oxidizing agents.</li> <li>Further information about storage conditions:</li> <li>Store locked up.</li> </ul> |  |  |
| Specific end use(s):   | No relevant information available.   |  |  |

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| Control parameters:   |  | 1              |   |
|---|--|----------------|---|
| Components with limit values that<br>require monitoring at the workplace: | 64-17-5<br>Ethanol:                    | PEL (USA):     | Long-term value: 1,900 mg/m³, 1,000 ppm   |
|   |  | REL (USA):     | Long-term value: 1,900 mg/m³, 1,000 ppm   |
|   |  | EV (Canada):   | Long-term value: 1,900 mg/m³, 1,000 ppm   |
|   |  | LMPE (Mexico): | Long-term value: 1000 ppm A3  |
|   | 2807-30-9 2<br>(propyloxy)<br>ethanol: | EV (Canada):   | Long-term value: 110 mg/m³, 25 ppm Skin   |
|   | 71-23-8                                | PEL (USA):     | Long-term value: 500 mg/m³, 200 ppm   |
|   | propan-1-ol:                           | REL (USA):     | Short-term value: 625 mg/m³, 250 ppm<br>Long-term value: 500 mg/m³, 200 ppm Skin                                  |
|   |  | TLV (USA):     | Long-term value: 246 mg/m³, 100 ppm   |
|   |  | EL (Canada):   | Long-term value: 100 ppm  |
|   |  | EV (Canada):   | Long-term value: 100 ppm  |
|   |  | LMPE (Mexico): | Long-term value: 100 ppm A4   |
|   | 108-21-4                               | PEL (USA):     | Long-term value: 950 mg/m³, 250 ppm   |
|   | isopropyl acetate:                     | TLV (USA):     | Short-term value: NIC-626 mg/m³, NIC-150 pp<br>Long-term value: NIC-417 mg/m³, NIC-100 ppn                        |
|   |  | EL (Canada):   | Short-term value: 200 ppm<br>Long-term value: 100 ppm   |
|   |  | EV (Canada):   | Short-term value: 200 ppm<br>Long-term value: 100 ppm   |
|   |  | LMPE (Mexico): | Short-term value: 200 ppm<br>Long-term value: 100 ppm   |
|   | 67-63-0                                | PEL (USA):     | Long-term value: 980 mg/m³, 400 ppm   |
|   | Propan-2-ol:                           | REL (USA):     | Short-term value: 1225 mg/m³, 500 ppm<br>Long-term value: 980 mg/m³, 400 ppm                                      |
|   |  | TLV (USA):     | Short-term value: 984 mg/m³, 400 ppm<br>Long-term value: 492 mg/m³, 200 ppm BEI                                   |
|   |  | EL (Canada):   | Short-term value: 400 ppm<br>Long-term value: 200 ppm   |
|   |  | EV (Canada):   | Short-term value: 400 ppm<br>Long-term value: 200 ppm   |
|   |  | LMPE (Mexico): | Short-term value: 400 ppm<br>Long-term value: 200 ppm A4, IBE   |
| Ingredients with biological limit values:                                 | 67-63-0<br>Propan-2-ol:                | BEI (USA):     | 40 mg/L<br>Medium: urine<br>Time: end of shift at end of workweek<br>Parameter: Acetone (background, nonspecific) |

#### SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| Individual protection measures, such as personal protective equipment: |  |
|--|--|
| General protective and hygienic measures:                              | The usual precautionary measures for handling chemicals should be followed.<br>Keep away from foodstuffs, beverages and feed.<br>Wash hands before breaks and at the end of work.<br>Do not eat, drink or smoke while using the product.<br>Immediately remove all soiled and contaminated clothing.<br>Do not breathe dust/fume/gas/mist/vapors/spray.<br>Avoid contact with the eyes and skin. |
| Eye/face protection:   | Safety glasses<br>Follow relevant national guidelines concerning the use of protective eye wear.   |
| Skin protection:   | Protective work clothing   |
| Hand protection:   | Protective gloves<br>The glove material has to be impermeable and resistant to the product/the substance/<br>the preparation.  |
| Limitation and supervision of exposure into the environment:           | No relevant information available.   |
| Risk management measures:  | No relevant information available.   |

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| General information:                           |  |  |
|--|--|--|
| Appearance and physical state:                 | Liquid   |  |
| Color:   | According to product specification.  |  |
| Type of Odor:                                  | Not determined   |  |
| Odor threshold:                                | Not determined   |  |
| Important health, safety and environmental inf | formation:   |  |
| Initial Boiling Point and Boiling Range:       | >35°C (>95°F)  |  |
| Melting Point/Freezing Point:                  | Not determined   |  |
| Flammability Classification:                   | Not applicable   |  |
| Flash Point:                                   | 14°C (57.2°F)  |  |
| Auto-ignition Temperature:                     | Not determined   |  |
| Decomposition Temperature:                     | Not determined   |  |
| Flammability Limits (lower/upper):             | Not determined   |  |
| Evaporation rate:                              | Not determined   |  |
| Vapor Pressure:                                | Not determined   |  |
| Vapor Density (Air=1):                         | Not determined   |  |
| Octanol/Water Partition Coefficient (log Pow): | Not determined   |  |
| Specific Gravity:                              | Not determined   |  |
| Bulk Density:                                  | Not determined   |  |
| Water Solubility:                              | Not miscible or difficult to mix.  |  |
| pH:  | Not determined   |  |
| Viscosity (dynamic, kinematic):                | Not determined   |  |
| Explosive Properties:                          | Product is not explosive. However, formation of explosive air/<br>vapor mixtures are possible. |  |
| Oxidizing Properties:                          | Non-oxidizing  |  |
| Molecular Formula:                             | Not determined   |  |
| Molecular Weight:                              | Not determined   |  |
| Relative Density:                              | Not determined   |  |

## SECTION 10 - STABILITY AND REACTIVITY

| Reactivity:  | No relevant information available.  |  |  |
|--|---|--|--|
| Stability:   | Stable under normal temperatures and pressures.   |  |  |
| Possibility of hazardous reactions:                            | <ul> <li>Highly flammable liquid and vapor.</li> <li>Reacts violently with oxidizing agents.</li> <li>Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.</li> <li>Toxic fumes may be released if heated above the decomposition point.</li> <li>Used empty containers may contain product gases which form explosive mixtures with air.</li> </ul> |  |  |
| Conditions to avoid:   | Excessive heat  |  |  |
| Incompatible materials:  | Oxidizers, strong bases, strong acids   |  |  |
| Hazardous decomposition products (under fire conditions only): | Carbon monoxide, carbon dioxide, oxides of nitrogen and sulfur<br>Chlorine compounds  |  |  |

## SECTION II - TOXICOLOGICAL INFORMATION

| Information on toxicological effects:                  |   |                 |
|--|---|-----------------|
| Acute toxicity: Harmful if swallowed                   |   |                 |
| LD/LC50 values that are relevant for classification:   |   |                 |
| 64-17-5 Ethanol:                                       | Oral: LD50 7,060 mg/kg (rat)                                      |                 |
|  | Inhalative: LC50/4h 20,000 mg/l (rat)                             |                 |
| 2807-30-9 2-(propyloxy)ethanol:                        | Oral: LD50 2,260 mg/kg (mouse); 3,                                | 100 mg/kg (rat) |
|  | Dermal: LD50 1,300 mg/kg (rabbit)                                 |                 |
| 2390-60-5 Basic Blue 7:                                | Oral: LD50 100 mg/kg (rat)  |                 |
|  | Dermal: LD50 >2,500 mg/kg (rabbit)                                |                 |
| 6358-36-7 Basic yellow 37:                             | Oral: LD50 >50-300 mg/kg (rat)                                    |                 |
| Primary irritant effects:                              |   |                 |
| Skin Contact:  | Irritant to skin and mucous membra                                | nes.            |
| Eye Contact:   | Causes eye irritation.  |                 |
| Sensitization:   | Based on available data, the classification criteria are not met. |                 |
| Carcinogenic categories:                               |   |                 |
| IARC (International Agency for Research on Cancer):    | 64-17-5 Ethanol I   | 1               |
|  | 13463-67-7 titanium dioxide                                       | 2B              |
| NTP (National Toxicology Program):                     | None of the ingredients are listed.                               |                 |
| OSHA-Ca (Occupational Safety & Health Administration): | None of the ingredients are listed.                               |                 |
| Possible routes of exposure:                           | Ingestion, inhalation, eye contact, skin contact.                 |                 |
| Germ cell mutagenicity:                                | Based on available data, the classification criteria are not met. |                 |
| Carcinogenicity:                                       | Based on available data, the classification criteria are not met. |                 |
| Reproductive toxicity:                                 | Based on available data, the classification criteria are not met. |                 |
| STOT-single exposure:                                  | Based on available data, the classification criteria are not met. |                 |
| STOT-repeated exposure:                                | Based on available data, the classification criteria are not met. |                 |
| Aspiration hazard:                                     | Based on available data, the classification criteria are not met. |                 |

## SECTION 12 - ECOLOGICAL INFORMATION

| Toxicity:                      |   |
|--------------------------------|---|
| Aquatic toxicity:              | Toxic to aquatic life with long lasting effects:<br>2390-60-5 Basic Blue 7<br>LC50 <1mg/l (daphnia)   |
| Persistence and degradability: | No relevant information available.  |
| Bioaccumulative potential:     | No relevant information available.  |
| Mobility in soil:              | No relevant information available.  |
| Other adverse effects:         | No relevant information available.  |
| Additional information:        | Avoid release to the environment.<br>Due to available data on eliminability/decomposition and bioaccumulation<br>potential prolonged term damage of the environment cannot be excluded. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

| Waste treatment methods: |  |
|--------------------------|--|
| Disposal:                | The user of this material has the responsibility to dispose of unused<br>material, residues and containers in compliance with all relevant local,<br>state and federal laws and regulations regarding treatment, storage and<br>disposal for hazardous and non-hazardous wastes. |
| Container Disposal:      | Disposal must be made according to official regulations.   |

#### SECTION 14 - TRANSPORT INFORMATION

| PACKING GROUP (DOT, ADR, IMDG, IATA):                                     | 2  |  |
|---|--|--|
| DOT:  |  |  |
| DOT Proper Shipping Description:  | Printing Ink   |  |
| Hazard Class:   | 3  |  |
| Placard:  | Flammable Liquids  |  |
| Marine Pollutant:   | Yes - Product contains environmentally hazardous substances:<br>Basic yellow 37, Basic Blue 7  |  |
| Transport/additional information:   | Limited Quantity for packages less than 30 kg gross and inner packagings<br>less than 5 L each. Labeling as a Marine Pollutant is only required for bulk<br>single package shipments. Bulk packaging consists of a maximum capacity<br>of greater than 450 L (119 gallons) for a liquid and a maximum net mass<br>greater than 400 kg (882 pounds) for a solid. (See 171.4(c)).                                      |  |
| IMDG:   |  |  |
| UN number:  | UNI210   |  |
| UN proper shipping name:  | Printing Ink   |  |
| Hazard Class:   | 3  |  |
| Placard:  | Flammable Liquids  |  |
| EMS No.:  | F-E, S-D   |  |
| Marine Pollutant:   | Yes - Product contains environmentally hazardous substances:<br>Basic yellow 37, Basic Blue 7  |  |
| Transport/additional information:   | Limited Quantity for packages less than 30 kg gross and inner packagings less<br>than 5 L each. Marine pollutants packaged in single or combination packagings<br>containing a net quantity per single or inner packaging of 5 L or less for liquids<br>or having a net mass per single or inner packaging of 5 kg or less for solids are<br>not subject to provisions relevant to marine pollutants. (See 2.10.2.7) |  |
| IATA:   |  |  |
| UN No:  | UN1210   |  |
| Hazard Class:   | 3  |  |
| Packing group (DOT):  | 2  |  |
| Placard:  | Flammable Liquids  |  |
| EMS No.:  | F-E, S-D   |  |
| Transport/additional information:   | Limited Quantity for packages less than 30 kg gross and inner packagings less than 0.5 L each / I L net.   |  |
| ADR:  |  |  |
| Hazard Class:   | 3 (FI) Flammable liquids   |  |
| Label:  | 3  |  |
| Transport/additional information:   | Limited Quantity for packages less than 30kg gross and inner packagings less<br>than 5 L each. Marine pollutants packaged in single or combination packagings<br>containing a net quantity per single or inner packaging of 5 L or less for liquids<br>or having a net mass per single or inner packaging of 5 kg or less for solids are<br>not subject to provisions relevant to marine pollutants (See 5.2.1.81.). |  |
| Special precautions for user:   |  |  |
| Warning: Flammable Liquids  |  |  |
| Danger code (Kemler):   | 33   |  |
| EMS number:   | F-E,-S-D   |  |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: | Not applicable   |  |

### SECTION 15 - REGULATORY INFORMATION

| Hazard categories   |  |
|---|--|
| Section 302 (extremely hazardous substances):                     | None of the ingredients are listed.  |
| Section 355 (extremely hazardous substances):                     | None of the ingredients are listed.  |
| Section 313 (specific toxic chemical listings):                   | 67-63-0 Propan-2-ol  |
| TSCA (Toxic Substances Control Act):                              | All ingredients are listed.  |
| Proposition 65 (California):                                      | Used as directed, this product will NOT expose you to chemicals known to cause cancer.   |
|   | Ethanol - listing refers specifically to alcoholic beverage consumption and<br>is not applicable for product. Reference to titanium dioxide is based on<br>unbound respirable particles and is not generally applicable to product as<br>supplied.<br>64-17-5 Ethanol<br>13463-67-7 titanium dioxide |
| Chemicals known to cause developmental toxicity for females:      | None of the ingredients are listed.  |
| Chemicals known to cause developmental toxicity for males:        | None of the ingredients are listed.  |
| Chemicals known to cause developmental toxicity:                  | Ethanol - listing refers specifically to alcoholic beverage consumption and<br>is not applicable for product.<br>64-17-5 Ethanol   |
| EPA (Environmental Protection Agency):                            | None of the ingredients are listed.  |
| IARC (International Agency for Research on Cancer):               | 64-17-5 Ethanol<br>13463-67-7 titanium dioxide   |
| NIOSH-Ca (National Institute for Occupational Safety and Health): | Present in trace quantities:<br>13463-67-7 titanium dioxide  |

## SECTION 16 - OTHER INFORMATION

| HMIS Hazard ID:   |                          |
|---|--------------------------|
| Health:   | No information available |
| Flammability:   | No information available |
| Reactivity:   | No information available |
| Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect |                          |

#### **Disclaimer:**

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

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| National Chemical Inventories      | 5:   |
|------------------------------------|--|
| All components of this product are | e listed on the following chemical substance inventories: TSCA (USA) |
| DSL                                | (Canada)   |
| EINECS                             | (Europe)   |
| ENCS                               | (Japan) ECL  |
|                                    | (Korea)  |
| AICS                               | (Australia) NZIoC  |
|                                    | (New Zealand)  |
| PICCS                              | (Philippines)  |
| IECSC                              | (China)  |

| ACGIH  | American Conference of Governmental Industrial Hygienists   |
|--------|---|
| ADR    | International carriage of Dangerous goods by Road   |
| AICS   | Australian Inventory of Chemical Substances   |
| ATE    | Acute Toxicity Estimate   |
| BfR    | Bundesinstitut für Risikobewertung recommendations for food contact materials   |
| BCF    | Bioconcentration Factor   |
| BOD5   | 5-day Biochemical Oxygen Demand   |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act  |
| CLP    | Classification, Labeling and Packaging regulation   |
| COD    | Chemical Oxygen Demand DOT<br>Department of Transportation DSL<br>Domestic Substances List  |
| EINECS | European Inventory of Existing Chemical Substances  |
| ECL    | Existing Chemicals List (Korea)   |
| ENCS   | Existing and New Chemical Substances Inventory (Japan)  |
| EN 689 | Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy. |
| ERG    | Emergency Response Guide  |
| GHS    | Globally Harmonized System  |
| HMIS   | Hazardous Materials Information System IARC<br>International Agency for Research on Cancer IATA<br>International Air Transport Association                  |
| ICAO   | International Civil Aviation Organization IDLH<br>Immediately Dangerous to Life and Health IMDG<br>International Maritime Dangerous Goods                   |
| LD50   | Lethal Dose to 50% of test animal population  |
| MAK    | Maximale Arbeitsplatz Konzentration   |
| NTP    | National Toxicology Program   |
| OEL    | Occupational Exposure Limit   |
| OSHA   | Occupational Safety & Health Administration   |
| РВТ    | Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit  |
| PICCS  | Philippine Inventory of Commercial Chemical Substances  |
| PNEC   | Predicted No Effect Concentration   |
| REACH  | Registration, Evaluation and Authorization of Chemical Substances   |
| RID    | International carriage of dangerous goods by Rail SARA<br>Superfund Amendments and Reauthorization Act STEL Short Term<br>Exposure Limit                    |
| SVHC   | Substance of Very High Concern  |
| TLV    | Threshold Limit Value   |
| TSCA   | Toxic Substances Control Act  |
| TWA    | Time Weighted Average   |
| VOC    | Volatile Organic Compound   |
| WGK    | Wassergefahrdungsklasse (Water Hazard Class) WHMIS<br>Workplace Hazardous Material Identification System  |