

SAFETY DATA SHEET

according to US Regulation 29 CFR 1910.1200 and the Canadian HPA

SECTION 1. IDENTIFICATION

| Commercial Pro | duct Name | : | GEOGARD 22 | 21 |
|----------------|-----------|---|------------|-----|
| Product name | | : | Geogard ™ | 221 |

| Recommended use of the | chemical an | nd restrictions | on use | | |
|------------------------|-------------|-----------------|---------|----------------|---------------|
| Recommended use | : | : Conservation | n agent | (preservative) | for cosmetics |

SECTION 2. HAZARDS IDENTIFICATION

| GHS Classification | | | |
|---------------------|-------------|-----------|----|
| Acute toxicity (Or | ral) : | Catego ry | 4 |
| Acute toxicity (Inh | nalation) : | Catego ry | 4 |
| Eye irritation | : | Category | 2A |

| GHS | label | elements |
|-----|-------|----------|
|-----|-------|----------|

Hazard pictograms

Precautionary statements



Signal word: WarningHazard statements: H302 + H332 Harmful if swallowed or if inhaled.
H319 Causes serious eye irritation.

Prevention:
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.



> P271 Use only outdoors or in a well-ventilated area. P280 Wear eye protection/ face protection. Response: P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention. Storage: P402 + P404 Store in a dry place. Store in a closed container. P410 + P403 Protect from sunlight. Store in a well-ventilated place. Disposal: P501 Dispose of contents/container in accordance with local regulation.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Hazardous components

| Chemical name / Synonyms | CAS-No. | Concentration (% w/w) |
|--|------------|-----------------------|
| Benzyl alcohol | 100-51-6 | >= 70 - < 90 |
| 3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione | 520-45-6; | >= 5 - < 10 |
| | [771-03-9] | |

SECTION 4. FIRST AID MEASURES

| lf inhaled | Move to fresh air. Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice. If breathing is irregular or stopped, administer artificial respira- tion. Keep respiratory tract clear. |
|-------------------------|---|
| In case of skin contact | After contact with skin, wash immediately with plenty of soap and water. If on clothes, remove clothes. In the case of skin irritation or allergic reactions see a physi- cian. |
| In case of eye contact | Rinse immediately with plenty of lukewarm water, also under the eyelids, for at least 15 minutes. Call a physician immediately. Remove contact lenses. Keep eye wide open while rinsing. Protect unharmed eye. |



| If swallowed | : | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. |
|--|---|--|
| Most important symptoms and ef- fects, both acute and delayed | : | No information available. |
| Notes to physician | : | Treat symptomatically. |

SECTION 5. FIREFIGHTING MEASURES

| Suitable extinguishing media | : | Water spray Alcohol-resistant foam Dry chemical |
|---|---|--|
| Unsuitable extinguishing media | : | High volume water jet |
| Specific hazards during firefighting | : | Heating or fire can release toxic gas. |
| Further information | : | Use water spray to cool unopened containers. |
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency proce- dures | : | Use personal protective equipment. Ensure adequate ventilation. Use respirator when performing operations involving potential exposure to vapour of the product. |
|---|---|--|
| Environmental precautions | : | Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. |
| Methods and materials for contain- ment and cleaning up | : | Contain spillage, and then collect with non-combustible ab- sorbent material, (e.g. sand, earth, diatomaceous earth, ver- miculite) and place in container for disposal according to local / national regulations (see section 13). |

SECTION 7. HANDLING AND STORAGE

| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection. |
|---|---|--|
| Advice on safe handling | : | Avoid formation of aerosol. Do not breathe vapours/dust. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the ap- plication area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. |



| Conditions for safe storage | Keep container tightly closed. Keep in a well-ventilated place. Electrical installations / working materials must comply with the technological safety standards. To maintain product quality, do not store in heat or direct sun- light. |
|---|--|
| Further information on storage sta- bility | : No decomposition if stored and applied as directed. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parame- ters / Permissi- ble concentra- tion | Basis |
|----------------|----------|-------------------------------------|---|-------|
| Benzyl alcohol | 100-51-6 | TWA | 10 ppm 44.20 mg/m3 | WEEL |

| Personal protective equipment | | |
|-------------------------------|---|---|
| Respiratory protection | : | In the case of vapour formation use a respirator with an ap- proved filter. Respirator with ABEK filter. |
| | | Respirator with a vapour filter (EN 141) |
| Hand protection | | |
| Mate ri al | : | Nitrile rubber |
| Remarks | : | Wear protective gloves. Break through time : > 480 min |
| Eye protection | : | Safety glasses with side-shields conforming to EN166 Wear face-shield and protective suit for abnormal processing problems. |
| Skin and body protection | : | Choose body protection according to the amount and con- centration of the dangerous substance at the work place. |
| Hygiene measures | : | Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | liquid |
|------------|---|-------------------|
| Colour | : | yellow |
| Odour | : | no data available |



| Odour Threshold | : no data availa | able |
|--|-------------------|------|
| рН | : no data availa | able |
| Melting point/range | : no data availa | able |
| Boiling point/boiling range | : no data availa | able |
| Flash point | : > 205 °F / 96 | S°C |
| Evaporation rate | : no data availa | able |
| Flammability (solid, gas) | : no data availa | able |
| Flammability (liquids) | : no data availa | able |
| Self-ignition | :: no data availa | able |
| Upper explosion limit | : no data availa | able |
| Lower explosion limit | : no data availa | able |
| Vapour pressure | : no data availa | able |
| Relative vapour density | : no data availa | able |
| Relative density | : no data availa | able |
| Density | : no data availa | able |
| Bulk density | : no data availa | able |
| Water solubility | : slightly solub | le |
| Partition coefficient: n-octanol/water | : no data availa | able |
| Auto-ignition temperature | : no data availa | able |
| Decomposition temperature | : no data avail | able |
| Viscosity, dynamic | : no data availa | able |
| Viscosity, kinematic | : no data availa | able |
| Explosive properties | : no data avail | able |
| Oxidizing properties | : no data avail | able |
| Minimum ignition energy | : no data avail | able |
| | | |

SECTION 10. STABILITY AND REACTIVITY

| Reactivity | : | No decomposition if stored and applied as directed. |
|--------------------|---|---|
| Chemical stability | : | Stable under recommended storage conditions. |



| Possibility of hazardous reactions | : | Stable under recommended storage conditions. No hazards to be specially mentioned. |
|------------------------------------|---|---|
| Conditions to avoid | : | Heat |
| Incompatible materials | : | Strong acids and strong bases Oxidizing agents |
| Hazardous decomposition products | : | No decomposition if used as directed. |

SECTION 11. TOXICOLOGICAL INFORMATION

| Acute toxicity | | |
|--|---|---|
| Acute oral toxicity | : | Acute toxicity estimate: 1,605 mg/kg Method: Calculation method |
| Acute inhalation toxicity | : | Acute toxicity estimate: 1.67 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method |
| Acute dermal toxicity | : | Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method |
| Skin corrosion/irritation | | Method. Calculation method |
| Remarks: no data available | | |
| Cariana ana damana/ana imitatian | | |
| Serious eye damage/eye irritation Remarks: no data available | | |
| Respiratory or skin sensitisation | | |
| Remarks: no data available | | |
| Germ cell mutagenicity | | |
| Geno to xicity in vitro | : | Remarks: no data available |
| Carcinogenicity | | |
| Remarks: no data available | | |
| IARC | | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| OSHA | | No component of this product present at levels greater than or |
| NTP | | equal to 0.1% is on OSHA's list of regulated carcinogens. No component of this product present at levels greater than or |
| | | equal to 0.1% is identified as a known or anticipated carcino- |
| ACGIH | | gen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| | | |



Reproductive toxicity

Effects on fertility

: Remarks: no data available

STOT - single exposure

Remarks: no data available

STOT - repeated exposure

Remarks: no data available

Aspiration toxicity

No aspiration toxicity classification

Further information

Remarks: no data available

The following toxicological data refer to:

| 3-Acetyl-6-methyl-2H-pyran-2,4(3H)-di | one | e(CAS-No.: 520-45-6) |
|---------------------------------------|-----|------------------------------------|
| Acute toxicity | | |
| Acute oral toxicity | : | LD50 (Rat): 1,480 mg/kg |
| | | Method: OECD Test Guideline 401 |
| Acute dermal toxicity | : | LD50 (Rabbit): 3,000 - 5,000 mg/kg |

Skin corrosion/irritation

Species: Rabbit Exposure time: 4 h Method: DOT Result: No skin irritation

Serious eye damage/eye irritation

Species: Chicken eye Result: No eye irritation Exposure time: 4 h Assessment: No eye irritation Method: OECD Test Guideline 438 GLP: yes

Respiratory or skin sensitisation

Test Type: Local Lymph Node Assay Species: Mouse Method: OECD Test Guideline 429 Result: not sensitizing GLP: yes

Germ cell mutagenicity

Genotoxicity in vitro

: Test Type: Ames test Species: Salmonella typhimurium



Result: negative

| | | Ŭ |
|---|------|---|
| | : | Test Type: Chromosome aberration test in vitro Species: Human lymphocytes Method: OECD Test Guideline 473 Result: negative GLP: yes Test substance: Information given is based on data obtained from similar substances. |
| | : | Test Type: gene mutation test Species: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 490 Result: negative GLP: yes Test substance: Information given is based on data obtained from similar substances. |
| Poproductivo toxicity | | |
| Reproductive toxicity Effects on fertility | : | Test Type: Pre-/postnatal development Species: Rat Application Route: Oral General Toxicity - Parent: LOAEL: 100 mg/kg body weight General Toxicity F1: NOAEL: 100 mg/kg body weight |
| STOT - single exposure | | |
| Remarks: no data available | | |
| Repeated dose toxicity Species: Rat, male and female NOAEL: 78 mg/kg Exposure time: 2 y | | |
| Species: Rat, male NOAEL: > 100 mg/kg Exposure time: 34 d Number of exposures: 5 days/week | | |
| Further information Remarks: no data available | | |
| The following toxicological data refe | er t | 0: |
| Benzyl alcohol(CAS-No.: 100-51-6) | | |
| Acute toxicity | | |
| Acute oral toxicity | : | LD50 (Rat, male): 1,620 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): > 4.178 mg/l Exposure time: 4 h |

Disclaimer: As the users' condition of work is not known, the information contained in this Material Safety Data Sheet is accurate to the best of our knowledge and is based on the national community regulations. The product must not be employed for uses other than those specified without having previously obtained written handling instructions. Users are responsible for taking all necessary to comply with the requirements of the law and local regulations. The information contained in this sheet should be regarded as the description of the safety requirements relating to our products and not as a guarantee of its properties.

toxicity

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhalation



Acute dermal toxicity

: LD50 (Rabbit): 2,000 mg/kg Assessment: The component/mixture is minimally toxic after single contact with skin. Remarks: Literary reference

Skin corrosion/irritation

Species: Rabbit Exposure time: 4 h Method: OECD Test Guideline 404 Result: No skin irritation

Serious eye damage/eye irritation

Species: Rabbit Result: Irritation to eyes, reversing after 7 to 21 days Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Test Type: Magnusson & Kligman Species: Guinea pig Result: not sensitizing Remarks: Literary reference

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| Germ cell mutagenicity | | |
|------------------------|---|--|
| Genotoxicity in vitro | : | Test Type: Ames test Result: negative |
| | : | Test Type: gene mutation test Species: mouse lymphoma cells Result: equivocal |
| | : | Test Type: Chromosome aberration test in vitro Result: positive |
| Genotoxicity in vivo | : | Test Type: In vivo micronucleus test Species: Mouse Application Route: ip Dose: 50 -100-200 mg/kg Result: negative |
| Reproductive toxicity | | |

| Species: Mouse, female | |
|-------------------------------|------|
| Application Route: Oral | |
| Dose: 10d | |
| Fertility: NOAEL: 550 mg/kg f | iood |

Further information

Remarks: May cause sensitisation of susceptible persons by skin contact.

Remarks: Dermal absorption possible

Remarks: High concentration of vapours may induce unconsciousness.



SECTION 12. ECOLOGICAL INFORMATION

| Ecotoxicity Toxicity to fish | : | Remarks: no data available |
|---|---|---|
| Persistence and degradability Biodegradability | : | Remarks: no data available |
| Bioaccumulative potential Bioaccumulation | : | Remarks: no data available |
| Components: | | |
| Benzyl alcohol: Partition coefficient: n-octanol/water | : | log Pow: 1.05 (20 °C) |
| 3-Acetyl-6-methyl-2H-pyran-2,4(3H) Partition coefficient: n-octanol/water | | ne: log Pow: 0.778 Method: QSAR |
| Mobility in soil Distribution among environmental compartments | : | Remarks: no data available |
| Other adverse effects Ozone-Depletion Potential | : | Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone- Depleting Substances (40 CFR 82, Subpt. A, App A & B) Remarks: This product neither contains, nor was manufac- tured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). |
| Additional ecological information | : | no data available |
| The following ecotoxicological data 3-Acetyl-6-methyl-2H-pyran-2,4(3H)-d | | |
| Ecotoxicity | | |
| Toxicity to fish | : | NOEC (Cyprinus carpio (Carp)): 218 - 415 mg/l Exposure time: 72 h Analytical monitoring: no |
| Toxicity to daphnia and other aquat- ic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test substance: Information given is based on data obtained from similar substances. Method: OECD Test Guideline 202 GLP: yes |
| Toxicity to algae | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 32.1 mg/l Exposure time: 72 h |



| Test Type: Growth inhibition Test substance: Information given is based on data obtained from similar substances. Method: OECD Test Guideline 201 GLP: yes |
|--|
| : NOEC (activated sludge): 38 mg/l Exposure time: 14 d Test substance: Information given is based on data obtained from similar substances. GLP: yes |
| |
| : Test Type: OECD Coupled Units Concentration: 12 mg/l Result: biologically well degradable Biodegradation: 99 % Method: OECD Test Guideline 303A GLP: no |
| Test Type: Zahn-Wellens Test Concentration: 400 mg/l Result: biologically well degradable Biodegradation: 96 % Exposure time: 14 d Method: OECD Test Guideline 302B |
| Test Type: Closed Bottle test Concentration: 2 mg/l Result: Readily biodegradable. Biodegradation: 81 % (Theoretical oxygen demand) Exposure time: 30 d Method: OECD Test Guideline 301D GLP: no |
| : Remarks: no data available |
| : Remarks: no data available |
| : This substance is not considered to be persistent, bioaccumu- lating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB). |
| a refer to: |
| |
| : LC50 (Leuciscus idus (Golden orfe)): 646 mg/l |
| |



| | | LC50 (Pimephales promelas (fathead minnow)): 460 mg/l Exposure time: 96 h |
|---|---|--|
| Toxicity to daphnia and other aquat- ic invertebrates | : | EC50 (Daphnia magna (Water flea)): 230 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 |
| Toxicity to algae | : | IC50 (Pseudokirchneriella subcapitata (green algae)): 770 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 |
| | | NOEC (Pseudokirchneriella subcapitata (green algae)): 310 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 |
| | | ErC50 (Pseudokirchneriella subcapitata (green algae)): 700 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 |
| Toxicity to daphnia and other aquat- ic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 51 mg/l Exposure time: 21 d Method: OECD Test Guideline 211 |
| Toxicity to microorganisms | : | EC50 (Pseudomonas putida): 658 mg/l Exposure time: 16 h Remarks: Literary reference |
| | : | EC50 (Photobacterium phosphoreum): 71 mg/l Exposure time: 30 min Remarks: Literary reference |
| Persistence and degradability | | |
| Biodegradability | : | Result: Readily biodegradable. Biodegradation: 95 – 97 % Exposure time: 21 d Method: OECD Test Guideline 301A |
| | | Result: Readily biodegradable. Biodegradation: 92 – 96 % Exposure time: 14 d Method: OECD Test Guideline 301C |
| Bioaccumulative potential | | |
| Bioaccumulation | : | Bioconcentration factor (BCF): 4 Remarks: Literary reference Does not bioaccumulate. |
| Mobility in soil no data available | | |
| Other adverse effects no data available | | |



SECTION 13. DISPOSAL CONSIDERATIONS

| Contaminated packaging : Dispose of as unused product. | Disposal methods Waste from residues | : Dispose of contents/container in accordance with local regula- tion. Contact waste disposal services. |
|--|--|---|
| Do not re-use empty containers. | Contaminated packaging | Do not dispose of waste into sewer. : Dispose of as unused product. |

SECTION 14. TRANSPORT INFORMATION

| DOT | | | Not dangerous goods |
|------|--|---|--|
| | UN number Proper shipping name Transport hazard class Packing group | : | Not applicable Not applicable Not applicable Not applicable |
| TDG | | - | Not dangerous goods |
| | UN number Proper shipping name Transport hazard class Packing group | : | Not applicable Not applicable Not applicable Not applicable |
| ΙΑΤΑ | | | Not dangerous goods |
| | UN number Proper shipping name Transport hazard class Packing group | : | Not applicable Not applicable Not applicable Not applicable |
| IMDG | | | Not dangerous goods |
| | UN number Proper shipping name Transport hazard class Packing group | : | Not applicable Not applicable Not applicable Not applicable |
| ADR | | • | Not dangerous goods |
| | UN number Proper shipping name Transport hazard class Packing group | : | Not applicable Not applicable Not applicable Not applicable |



RID

Not dangerous goods

| UN number Proper shipping name Transport hazard class Packing group | : | Not applicable Not applicable Not applicable Not applicable |
|--|---|--|
| Special precautions for user | : | none |
| Transport in bulk according to An- nex II of MARPOL 73/78 and the IBC Code | : | Not applicable |

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|------------------|----------|-----------------------|-----------------------------------|
| Hydroq ui no n e | 123-31-9 | 100 | * |
| | 11 14 | | |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|------------------|----------|-----------------------|-----------------------------------|
| Hydroq ui no n e | 123-31-9 | 100 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards

See above: SECTION 2. Hazard Identification-GHS Classification

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

| Components | CAS-No. | Concentration |
|------------------|----------|-------------------|
| Hydroq ui no n e | 123-31-9 | >= 0.001 - < 0.01 |
| | | % |



This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

| Components | CAS-No. | Concentration |
|------------------|----------|-------------------|
| Benzyl alcohol | 100-51-6 | >= 70 - < 90 % |
| Hydroq ui no n e | 123-31-9 | >= 0.001 - < 0.01 |
| | | % |

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

Clean Water Act

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

| Components | CAS-No. |
|----------------|----------|
| Benzyl alcohol | 100-51-6 |
| Hydroquinone | 123-31-9 |

Pennsylvania Right To Know

| Components | CAS-No. |
|--|---------------------|
| Benzyl alcohol | 100-51-6 |
| Water | 7732-18-5 |
| 3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione | 520-45-6 [771-03-9] |

New Jersey Right To Know

| Components | CAS-No. |
|--|---------------------|
| Benzyl alcohol | 100-51-6 |
| Water | 7732-18-5 |
| 3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione | 520-45-6 [771-03-9] |

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian lists

NPRI

| Components | CAS-No. |
|------------------|----------|
| Hydroq ui no n e | 123-31-9 |



The product components have the following inventory status: All components of this product are listed on the EPA TSCA 8(b) inventory list.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

WEEL

: US. OARS. WEELs Workplace Environmental Exposure Level Guide, as amended

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identi-fication System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organi-zation; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative