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| in various countries | |
| 828253 | |

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Gafquat™ 734

polymer

™ Trademark, Ashland or its subsidiaries, registered in

various countries

Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Cosmetics

Personal care

Details of the supplier of the safety data sheet
Ashland
P.O. Box 2219
Columbus, OH 43216
United States of America (USA)
+1-614-790-3333
EHSProductSafety@ashland.com

Emergency telephone number
1-800-ASHLAND (1-800-274-5263)

Regulatory Information Number
1-800-325-3751

Product Information
+1-614-790-3333

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2

Eye irritation : Category 2A

Specific target organ systemic toxicity - single

expecting toxicity sin

exposure

: Category 3 (Central nervous system)

GHS label elements

Hazard pictograms





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Signal Word : Danger

Hazard Statements : Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. No

smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ ventilating/ lighting/ equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Wash skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/ eye protection/ face protection.

Response:

IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rınsıng.

If eye irritation persists: Get medical advice/ attention.

In case of fire: Use dry sand, dry chemical or alcohol-resistant

foam to extinguish.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal

plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

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Hazardous components

| Chemical name | CAS-No. | Classification | Concentration (%) |
|---------------|---------|---------------------|-------------------|
| ETHANOL | 64-17-5 | Flam. Liq. 2; H225 | 52.00 |
| | | | |
| | | Eye Irrit. 2A; H319 | |
| | | | |
| | | STOT SE 3; H336 | |
| | | | |
| | | | |

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Call a POISON CENTRE or doctor/physician if exposed or

you feel unwell.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : Move to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Consult a physician after significant exposure.

In case of skin contact : If on skin, rinse well with water.

First aid is not normally required. However, it is

recommended that exposed areas be cleaned by washing

with soap and water.

If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

If swallowed : Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and

delayed

: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs

may initiate cardiac arrhythmias in persons exposed to this

material.

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through

the skin may include:

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stomach or intestinal upset (nausea, vomiting, diarrhea)

irritation (nose, throat, airways)

Cough confusion

irregular heartbeat respiratory failure

Causes serious eye irritation. May cause drowsiness or dizziness.

Notes to physician : No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray

Foam

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Never use welding or cutting torch on or near drum (even

empty) because product (even just residue) can ignite

explosively.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: carbon dioxide and carbon monoxide

formaldehyde-like Hydrocarbons

Specific extinguishing methods

:

Product is compatible with standard fire-fighting agents.

Further information : Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.

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for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Evacuate personnel to safe areas. Remove all sources of ignition. Ensure adequate ventilation.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

Environmental precautions

: Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13).

Other information

: Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water

spray jet.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling

: Open drum carefully as content may be under pressure.

Avoid formation of aerosol.

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Take precautionary measures against static discharges. Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the

application area.

For personal protection see section 8.

Dispose of rinse water in accordance with local and national

regulations.

Container may be opened only under exhaust ventilation

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hood.

Conditions for safe storage

: Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage. Observe label precautions.

No smoking.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type | Control | Basis |
|------------|---------|------------|---------------|-----------|
| · | | (Form of | parameters / | |
| | | exposure) | Permissible | |
| | | | concentration | |
| ETHANOL | 64-17-5 | STEL | 1,000 ppm | ACGIH |
| | | TWA | 1,000 ppm | NIOSH REL |
| | | | 1,900 mg/m3 | |
| | | TWA | 1,000 ppm | OSHA Z-1 |
| | | | 1,900 mg/m3 | |
| | | TWA | 1,000 ppm | OSHA P0 |
| | | | 1,900 mg/m3 | |
| | | PEL | 1,000 ppm | CAL PEL |
| | | | 1,900 mg/m3 | |

Engineering measures

: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection

In the case of vapour formation use a respirator with an approved filter.

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

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Hand protection

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Wear chemical splash goggles when there is the potential for

exposure of the eyes to liquid, vapor or mist.

Skin and body protection : Wear as appropriate:

Impervious clothing Safety shoes

Flame-resistant clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Wear resistant gloves (consult your safety equipment

supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.

When using do not eat or drink. When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : viscous

Physical state : liquid

Colour : light yellow

Odour : alcohol-like

Odour Threshold : No data available

pH : 7.5 - 9.5

Concentration: 25 % (as aqueous solution)

Melting point/freezing point : No data available

Boiling point/boiling range : 173.3 °F / 78.5 °C

Value for Component

Flash point : 12.2 °C

Evaporation rate : No data available

Flammability (solid, gas) : No data available

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Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : 53.2 hPaValue for Component

Relative vapour density : No data available

Relative density : No data available

Density : 1 g/cm3 (20 °C)

Solubility(ies)

Water solubility : soluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

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

: Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

excessive heat

Incompatible materials : Acids

Alkali metals

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Ammonia Bases halogens

inorganic materials Oxidizing agents sodium

Hazardous decomposition

products carbon

carbon dioxide and carbon monoxide

formaldehyde-like Hydrocarbons

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure Skin contact

Eye Contact Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Components:

ETHANOL:

Acute oral toxicity : LD50 (Rat): 7,060 mg/kg

Acute inhalation toxicity : LC50 (Rat): 117 - 125 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : LDLo (Rabbit): 20 g/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: No skin irritation

Result: Repeated exposure may cause skin dryness or cracking.

Remarks: May cause skin irritation in susceptible persons.

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Components:

ETHANOL:

Result: Slight, transient irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

Components:

ETHANOL:

Result: Irritating to eyes.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause drowsiness or dizziness.

Components:

ETHANOL:

Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Carcinogenicity:

IARC Group 1: Carcinogenic to humans

ETHANOL 64-17-5

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

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NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5.66 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 212.95 mg/l

Exposure time: 48 h

Ecotoxicology Assessment

Acute aquatic toxicity

: Acute aquatic toxicity Category 2; Toxic to aquatic life.

Chronic aquatic toxicity : Chronic aquatic toxicity Category 2; Toxic to aquatic life with

long lasting effects.

Components:

ETHANOL:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 12,000 - 16,000

mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 48 h Test Type: static test

Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable.

Components:
No data available

Bioaccumulative potential

Components: ETHANOL:

Partition coefficient: n-

: log Pow: -0.31

octanol/water

No data available

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Mobility in soil

<u>Components:</u> No data available

Other adverse effects

No data available

Product:

Additional ecological

information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with

long lasting effects.

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and

federal regulations.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD | SUBSIDIARY | PACKING | MARINE |
|-----------|----------------------|---------|------------|---------|-------------|
| | | CLASS | HAZARDS | GROUP | POLLUTANT / |
| | | | | | LTD. QTY. |

U.S. DOT - ROAD

| UN | 1866 | Resin solution | 3 | II | |
|----|------|----------------|---|----|--|
| | | | | | |

CFR_RAIL_C

| <u> </u> | · · | | | | |
|----------|------|----------------|---|----|--|
| UN | 1866 | Resin solution | 3 | II | |

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| ™ Trac | lemark, A | Ashland or its subsidiaries, re | gistered | | | |
| | | | | | | |
| | | ND WATERWAYS | | | | |
| UN | 1866 | Resin solution | 3 | | <u>II</u> | |
| | 245.2 | | | | | |
| TDG_RO | 1866 | RESIN SOLUTION | 3 | | ll . | |
| | | | | | | |
| TDG_R | AIL_C | | | | | |
| UN | 1866 | RESIN SOLUTION | 3 | | 11 | |
| | | | | | | |
| TDG_IN | <u>WT_C</u> 1866 | RESIN SOLUTION | 3 | | 11 | |
| | | | - | | | |
| INTERN | ATIONA | L MARITIME DANGEROUS | GOODS | | | |
| UN | 1866 | RESIN SOLUTION | 3 | | II | MARINE POLLUTANT:(2- |
| | | | | | | PROPENOIC |
| | | | | | | ACID, 2- METHYL-, 2- |
| | | | | | | (DIMETHYLA |
| | | | | | | MINO)ETHYL ESTER, |
| | | | | | | POLYMER |
| | | | | | | WITH 1- ETHENYL-2- |
| | | | | | | PYRROLIDIN |
| | | | | | | ONE) |
| INTEDN | ΔΤΙΩΝΑΙ | L AIR TRANSPORT ASSOC | CIATION - CA | 360 | | |
| UN | 1866 | Resin solution | 3 | | II | |
| | | | | | | |
| | | L AIR TRANSPORT ASSOC | | | | |
| UN | 1866 | Resin solution | 3 | | II | |
| MV DC | | | | | | |
| MX_DG UN | 1866 | RESINA, SOLUCIONES D | DE 3 | | II | |
| | | - | | | | |
| | | | | | | |

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*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

| Marine pollutant | yes |
|------------------|-----|
| | |

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ. SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 302 : This material does not contain any components with a section

302 EHS TPQ.

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.

Pennsylvania Right To Know

ETHANOL 64-17-5

2-PROPENOIC ACID, 2-METHYL-, 2- 53633-54-8 (DIMETHYLAMINO)ETHYL ESTER,

POLYMER WITH 1-ETHENYL-2-

PYRROLIDINONE

New Jersey Right To Know

ETHANOL 64-17-5

2-PROPENOIC ACID, 2-METHYL-, 2- 53633-54-8

(DIMETHYLAMINO)ETHYL ESTER, POLYMER WITH 1-ETHENYL-2-

PYRROLIDINONE

California Prop 65 This pro

This product does not contain any chemicals known to State

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of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : Personal care

KECI : On the inventory, or in compliance with the inventory

: On the inventory, or in compliance with the inventory **PICCS**

IECSC : On the inventory, or in compliance with the inventory

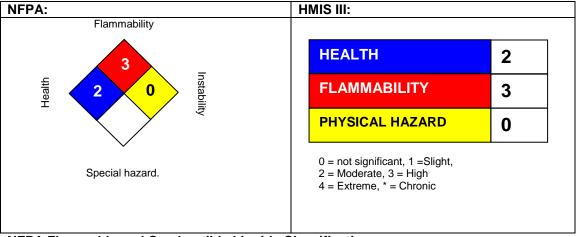
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 02/22/2018



NFPA Flammable and Combustible Liquids Classification

Flammable Liquid Class IB

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Full text of H-Statements

H225 Highly flammable liquid and vapor.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Sources of key data used to compile the Safety Data Sheet Ashland internal data including own and sponsored test reports The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; 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 Identification 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 Organization; 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

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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; 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