

Safety Data Sheet

Product name: Formaldehyde

CAS No.: 50-00-0

Prepared in accordance with GB/T 16483, GB/T 17519

SECTION 1: Identification of the substance/mixture and of the company/undertaking

>Product identifier

- Product name: Formaldehyde
- CBnumber: CB4853677
- CAS: 50-00-0
- EINECS Number: 200-001-8
- Synonyms: Formaldehyde,HCHO

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

- Relevant identified uses: For R&D use only. Not for medicinal, household or other use.
- Uses advised against: none

>Company Identification

- Company: Linyi Tuohui New Materials Co., Ltd.
- Address: Room A6159, 6F, Building 1, Linyi Software Park, No.6 Yihe Road, Zhimadun Subdistrict, Yishui New Area, Linyi City, Shandong Province, China
- Telephone: +86 176 6460 5089 (Manager Niu) / +86 130 4664 1786 (Manager Li)
- Email: nathan@tuohui-chem.com
- WhatsApp: +86 176 6460 5089
- Emergency telephone: +86 176 6460 5089

SECTION 2: Hazards identification

>GHS Label elements, including precautionary statements

- Symbol(GHS) 
- Signal word Danger

Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing.

Rinse SKIN with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazard statements

H314 Causes severe skin burns and eye damage

H317 May cause an allergic skin reaction

H330 Fatal if inhaled

H335 May cause respiratory irritation

H341 Suspected of causing genetic defects

H350 May cause cancer

H370 Causes damage to organs

SECTION 3: Composition/information on ingredients

>Substance

- Product name: Formaldehyde
- Synonyms: Formaldehyde, HCHO
- CAS: 50-00-0
- EC number: 200-001-8
- MF: CH₂O
- MW: 30.03

SECTION 4: First aid measures

>General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

>If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

>In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.

>In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

>If swallowed

After swallowing: fresh air. Make victim drink ethanol (e.g. 1 drinking glass of a 40% alcoholic beverage). Call a doctor immediately (mention methanol ingestion). Only in exceptional cases, if no medical care is available within one hour, induce vomiting (only in fully conscious persons) and make victim drink ethanol again (approx. 0.3 ml of a 40% alcoholic beverage/kg body weight/hour). Do not attempt to neutralise.

>Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

>Protection of first-aiders

For personal protection see section 8.

>Notes to physician

No data available

SECTION 5: Firefighting measures

>Suitable extinguishing media

Water Foam Carbon dioxide (CO₂) Dry powder

>Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

>Specific hazards during fire fighting

Mixture with combustible ingredients. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire.

>Hazardous combustion products

Carbon oxides

>Specific extinguishing methods

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

>Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

>NFPA 704

3

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SECTION 6: Accidental release measures

>Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

>Environmental precautions

Do not let product enter drains. Risk of explosion.

>Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material . Dispose of properly. Clean up affected area.

>Prevention of secondary hazards

Render harmless: Treatment with excess sodium hydrogen sulfite solution.

SECTION 7: Handling and storage

>Handling

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Avoidance of contact

Strong oxidizing agents Aniline Phenol Isocyanates Acid anhydrides Strong acids Strong bases
Amines Peroxides Acid chlorides Alkali metals Reducing agents

>Storage**Further information on storage conditions**

Keep container tightly closed in a dry and wellventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class

3, Flammable liquids

Recommended storage temperature

Recommended storage temperature see product label.

Packaging material

Suitable material: Amber Glass Bottle/Jar, Poly-lined Steel Drum

SECTION 8: Exposure controls/personal protection

>Ingredients with workplace control parameters

Biological occupational exposure limits

>Engineering measures

No data available

>Personal protective equipment**Respiratory protection**

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type

Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Tightly fitting safety goggles

Skin and body protection

Flame retardant antistatic protective clothing.

Hand protection

Material

Nitrile rubber

Break through time

480 min

Glove thickness

0.4 mm

Protective index

Full contact

Manufacturer

Camatril (KCL 730 / Aldrich Z677442, Size M)

Material

Break through time

60 min

Glove thickness

0.2 mm

Protective index

Splash contact

Manufacturer

P (KCL 743 / Aldrich Z677388, Size M)

Manufacturer

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de,
test method: EN374

Remarks

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

SECTION 9: Physical and chemical properties

>Information on basic physicochemical properties

- Solubilitywater: soluble
- Physical stateSolution
- Dielectric constant23.0 (Ambient)
- Henry's Law Constant 2.08×10^{-7} atm m^3 /mol) at 25 °C (flow-type generation system, spectrophotometry, Kanda et al., 2005)
- Appearanceliquid, clear
- Colorcolorless
- Odorpungent
- Odor ThresholdNo data available
- pH2.8 - 4.0
- Melting point/ rangeNo data available
- Boiling point/boiling range100 °C
- Flash point56.11 °C
Method: closed cup
- Evaporation rate1
- Flammability (solid, gas)No data available
- Flammability (liquids)No data available
- Burning rateNo data available
- Upper explosion limit / Upper flammability limit70 %(V)
- Lower explosion limit / Lower flammability limit7 %(V)
- Vapor pressure53 hPa (39 °C)
- Relative vapor density1.04
- Relative density1.09 g/mL at 25 °C(lit.)

- Density 1.09 g/mL (25 °C)
- Water solubility completely soluble (20 °C)
- Partition coefficient: n-octanol/water log Pow: 0.35
- Autoignition temperature 420 °C
- Decomposition temperature No data available
- Viscosity, dynamic No data available
- Viscosity, kinematic No data available
- Flow time No data available
- Explosive properties Not classified as explosive.
- Oxidizing properties none
- Molecular weight 30.03 g/mol
- Particle characteristics Particle size No data available

SECTION 10: Stability and reactivity

>Reactivity

Vapor/air-mixtures are explosive at intense warming.

>Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

>Contains the following stabilizer(s):

Methanol (>=9 - <=15 %)

>Possibility of hazardous reactions

No data available

>Conditions to avoid

Heating.

>Incompatible materials

Strong oxidizing agents Aniline Phenol Isocyanates Acid anhydrides Strong acids Strong bases
Amines Peroxides Acid chlorides Alkali metals Reducing agents

>Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

>11.1 Information on toxicological effects

Mixture Acute toxicity

Oral: No data available

Acute toxicity estimate Oral - 200.06 mg/kg (Calculation method)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Acute toxicity estimate Inhalation - 4 h - 1.36 mg/l - vapor (Calculation method)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages: damage of respiratory tract

Acute toxicity estimate Dermal - 556.75 mg/kg (Calculation method)

Skin corrosion/irritation

Remarks: Mixture causes burns.

Serious eye damage/eye irritation

Remarks: Mixture causes serious eye damage.

Risk of blindness!

Respiratory or skin sensitization

May cause sensitization by skin contact.

Mixture may cause an allergic skin reaction.

Germ cell mutagenicity

Evidence of genetic defects.

Carcinogenicity

Possible carcinogen.

Reproductive toxicity

Classified based on available data. For more details, see section 2

Specific target organ toxicity - single exposure

Mixture causes damage to organs. - Eyes, Central nervous system

Mixture may cause respiratory irritation.

Specific target organ toxicity - repeated exposure

Aspiration hazard

>11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., bronchospasm, Symptoms of exposure may include burning sensation,

coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting., Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., chest pain, Diffi- culty in breathing, May cause convulsions.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

Components formaldehyde

Acute toxicity

LD50 Oral - Rat - 100 mg/kg

Remarks: (Lit.)

Acute toxicity estimate Inhalation - 4 h - 0.51 mg/l - vapor (Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

LD50 Dermal - Rabbit - 270 mg/kg

Remarks: (RTECS)

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns. - 20 h (OECD Test Guideline 404)

Serious eye damage/eye irritation

Remarks: Causes serious eye damage.

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: positive (OECD Test Guideline 406)

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Aspiration hazard

Methanol

Acute toxicity estimate Oral - 100.1 mg/kg (Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Symptoms: Nausea, Vomiting

Acute toxicity estimate Inhalation - 4 h - 3.1 mg/l - vapor (Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Symptoms: Irritation symptoms in the respiratory tract.

Acute toxicity estimate Dermal - 300.1 mg/kg (Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Skin - Rabbit

Result: No skin irritation

Remarks: (ECHA)

Remarks: Drying-out effect resulting in rough and chapped skin.

Eyes - Rabbit

Result: No eye irritation

Remarks: (ECHA)

Sensitisation test: - Guinea pig

Result: negative (OECD Test Guideline 406)

Based on available data the classification criteria are not met.

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster lung cells

Result: negative

Method: OECD Test Guideline 474

Species: Mouse - male and female - Bone marrow

Result: negative

Did not show carcinogenic effects in animal experiments.

Based on available data the classification criteria are not met.

Causes damage to organs. - Eyes, Central nervous system

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute oral toxicity - Nausea, Vomiting

Acute inhalation toxicity - Irritation symptoms in the respiratory tract.

Specific target organ toxicity - repeated exposure

Aspiration hazard

Classified based on available data. For more details, see section 2

SECTION 12: Ecological information

>Ecotoxicity

>Components:

>formaldehyde:

Toxicity to fish

LC50 (*Morone saxatilis*): 6.7 mg/l End point: mortality Exposure time: 96 h Test Type: static test
Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates

EC50 (*Daphnia pulex* (Water flea)): 5.8 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants

ErC50 (*Desmodesmus subspicatus* (green algae)): 4.89 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

NOEC (*Daphnia magna* (Water flea)): ≥ 6.4 mg/l End point: reproduction rate Exposure time: 21 d Test Type: semi-static test Analytical monitoring: yes Method: OECD Test Guideline 211 GLP: yes

Toxicity to microorganisms

EC50 (activated sludge): 19 mg/l Exposure time: 3 h Test Type: static test Method: OECD Test Guideline 209

>Methanol:

Toxicity to fish

LC50 (*Lepomis macrochirus* (Bluegill)): 15,400.0 mg/l End point: mortality Exposure time: 96 h Test Type: flow-through test Analytical monitoring: yes Method: US-EPA

Toxicity to daphnia and other aquatic invertebrates

EC50 (*Daphnia magna* (Water flea)): 18,260 mg/l End point: Immobilization Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants

ErC50 (*Pseudokirchneriella subcapitata* (green algae)): ca. 22,000.0 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity)

NOEC (*Oryzias latipes* (Orange-red killifish)): 7,900 mg/l Exposure time: 200 h Remarks: (External MSDS)

Toxicity to microorganisms

IC50 (activated sludge): > 1,000 mg/l Exposure time: 3 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 209

>Persistence and degradability

>Components:

>formaldehyde:

Biodegradability

aerobic Inoculum: Sewage sludge Concentration: 10 mg/l Dissolved organic carbon (DOC) Result: Readily biodegradable. Biodegradation: 99 % Exposure time: 28 d Method: OECD Test Guideline 301A GLP: yes

BOD/COD

BOD/COD: 0.74 %

>Methanol:

Biodegradability

Result: Readily biodegradable. Biodegradation: 99 % Exposure time: 30 d Method: OECD Test Guideline 301D

Biochemical Oxygen Demand (BOD)

600 - 1,120 mg/g Incubation time: 5 d Remarks: (IUCLID)

Chemical Oxygen Demand (COD)

1,420 mg/g Remarks: (IUCLID)

ThOD

1,500 mg/g Remarks: (Lit.)

BOD/ThOD

76 % Remarks: Closed Bottle test (IUCLID)

Stability in water

Hydrolysis: 83 - 91 % at 19 °C(72 h) Remarks: Hydrolyzes on contact with water. Hydrolyzes readily. Degradation half life: 2.2 yr Remarks: reaction with hydroxyl radicals (IUCLID)

Photodegradation

Degradation (direct photolysis): 50 % Degradation half life: 17.2 d

>Bioaccumulative potential

>Components:

>formaldehyde:

Partition coefficient: noctanol/water

log Pow: 0.021 Remarks: (Lit.) Bioaccumulation is not expected.

>Methanol:

Bioaccumulation

Species: Cyprinus carpio (Carp) Bioconcentration factor (BCF): 1.0 Exposure time: 72 d

Temperature: 20 °C Concentration: 5 mg/l

Partition coefficient: noctanol/water

log Pow: -0.77 (25 °C) Method: (experimental) Remarks: (HSDB) Bioaccumulation is not expected.

>Mobility in soil

>Components:

>Methanol:

Stability in soil

Remarks: Will not adsorb on soil.

>Other adverse effects

>Components:

>formaldehyde:

Results of PBT and vPvB assessment

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

>Methanol:

Results of PBT and vPvB assessment

Substance is not persistent, bioaccumulative, and toxic (PBT).

Additional ecological information

Avoid release to the environment.

SECTION 13: Disposal considerations

>Disposal methods

Waste from residues

Offer surplus and non-recyclable solutions to a licensed disposal company.

SECTION 14: Transport information

>International Regulations

>IATA-DGR

UN/ID No. : UN 1198

Proper shipping name : Formaldehyde solution, flammable

Class : 3

Subsidiary risk : 8

Packing group : III

Labels : Class 3 - Flammable liquids, Class 8 - Corrosive substances

Packing instruction (cargo aircraft) : 365

Packing instruction (passenger aircraft) : 354

>IMDG-Code

UN number : UN 1198

Proper shipping name : FORMALDEHYDE SOLUTION, FLAMMABLE

Class : 3

Subsidiary risk : 8

Packing group : III

Labels : 3 (8)

EmS Code : F-E, S-C

Marine pollutant : no

>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National regulation GB 6944/12268

UN number : UN 1198

Proper shipping name : FORMALDEHYDE SOLUTION, FLAMMABLE

Class : 3

Subsidiary risk : 8

Packing group : III

Labels : 3 (8)

>Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15: Regulatory information

Catalogue of Hazardous Chemicals : This product is not listed in the catalogue of hazardous chemicals, but it meets the definition of hazardous chemicals and its principles of determination.

>National regulatory information

>Law on the Prevention and Control of Occupational Diseases

>Regulations on Safety Management of Hazardous Chemicals

>Identification of Major Hazard Installations for Hazardous Chemicals (GB 18218)

>No. / Code Chemical name / Category Threshold quantity

>J5 Acute toxic 500 t

>W5.4 Flammable liquids 5,000 t

>Hazardous Chemicals for Priority Management

Listed under SAWS

>Catalogue of Specially Controlled Hazardous

Listed Chemicals

>List of Explosive Precursors

Not listed

>Regulations on Occupational Labor Protection in the at workplaces where

>Toxic Substances Are Used

>Catalogue of Highly Toxic Chemicals

Listed

>Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

>China Severely Restricted Toxic Chemicals for Import and Export

>Regulation on the Administration of Precursor Chemicals

>Catalogue and Classification of Precursor Chemicals

>Regulations on the Administration of Controlled Chemicals

>List of Controlled Chemicals

>Regulations of Ozone Depleting Substances Management

>List of Controlled Ozone Depleting Substances

>List of Controlled Ozone Depleting Substances Import and Export

>Environmental Protection Law

>List of Priority Controlled Chemicals

>List of Key Controlled New Pollutants

Not listed

SECTION 16: Other information

>Full text of other abbreviations

ACGIH

USA. ACGIH Threshold Limit Values (TLV)

ACGIH BEI

ACGIH - Biological Exposure Indices (BEI)

GBZ 2.1-2007

Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

ACGIH / TWA

8-hour, time-weighted average

ACGIH / STEL

Short-term exposure limit

GBZ 2.1-2007 / PC-TWA

Permissible concentration - time weighted average

GBZ 2.1-2007 / PC-STEL

Permissible concentration - short term exposure limit

GBZ 2.1-2007 / MAC AIIC - Australian Invent Transport by Land of Bra bw - Body weight; CMR Standard of the German List (Canada); ECx - Conc associated with x% respo Chemical Substances (Jap response; ERG - Emerge GLP - Good Laboratory P cer; IATA - International Construction and Equipm Half maximal inhibitory c tion; IECSC - Inventory o tional Maritime Dangerous Industrial Safety and H Standardization; KECI - K tration to 50 % of a test (Median Lethal Dose); MA lution from Ships; n.o.s. No Observed (Adverse) E fect Level; NOELR - No Norm; NTP - National Toxi icals; OECD - Organizatio fice of Chemical Safety a and Toxic substance; PIC stances; (Q)SAR - (Quant (EC) No 1907/2006 of th Registration, Evaluation, Accelerating Decompositi Chemical Substance Inve Thailand Existing Chemical States); UN - United Nat Transport of Dangerous WHMIS - Workplace Hazar

Maximum allowable concentration ry of Industrial Chemicals

ANTT - National Agency for il

ASTM - American Society for the Testing of Materials

- Carcinogen, Mutagen or Reproductive Toxicant

DIN nstitute for Standardisation

DSL - Domestic Substances ntration associated with x% response

ELx - Loading rate se

EmS - Emergency Schedule

ENCS - Existing and New n)

ErCx - Concentration associated with x% growth rate cy Response Guide

GHS - Globally Harmonized System

actice

IARC - International Agency for Research on Canir Transport Association

IBC - International Code for the nt of Ships carrying Dangerous Chemicals in Bulk

IC50 ncentration

ICAO - International Civil Aviation Organiza- Existing Chemical Substances in China

IMDG - Interna- Goods

IMO - International Maritime Organization

ISHL alth Law (Japan)

ISO - International Organisation for rea Existing Chemicals Inventory

LC50 - Lethal Concenopulation

LD50 - Lethal Dose to 50% of a test population POL - International Convention for the Prevention of Pol- Not Otherwise Specified

Nch - Chilean Norm

NO(A)EC fect Concentration

NO(A)EL - No Observed (Adverse) Effect Loading Rate

NOM - Official Mexicanology Program

NZIOEC - New Zealand Inventory of Chemicals for Economic Co-operation and Development

OPPTS - Office of Pollution Prevention

PBT - Persistent, Bioaccumulative and Toxic - Philippines Inventory of Chemicals and Chemical Substances

SAR - Structure Activity Relationship

REACH - Regulation of the European Parliament and of the Council concerning the restriction and

SADT - Self-heating Temperature

SDS - Safety Data Sheet

TCSI - Taiwanese Chemical Substances Inventory

TDG - Transportation of Dangerous Goods

TECS Inventory

TSCA - Toxic Substances Control Act (United States)

UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

vPvB - Very Persistent and Very Bioaccumulative

GHS - Globally Harmonized System of Classification and Labelling of Chemicals