



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA HCS 2024 and Canada Hazardous Products Act (HPA) and
Hazardous Products Regulation (HPR), as amended

Issuing Date 18-Apr-2025

Revision date 18-Apr-2025

Revision Number 1

1. Identification

Product identifier

Product Name C6+ Hardener

Other means of identification

Product Code(s) C6P-15; C6P-30

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Chemical fixing

Restrictions on use Use as intended for concrete anchoring applications

Details of the supplier of the safety data sheet

Supplier Address

ITW Commercial Construction North America
155 Harlem Avenue
Glenview, IL 60025

Initial supplier identifier

ITW Construction Products Canada
120 Travail Road
Markham, Ontario
L3S 3J1

E-mail techsupport@itwccna.com

Emergency telephone number

Company Phone Number US: 1-800-848-5611
CA: 1-800-387-9692

Emergency telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification of the substance or mixture

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 2

Label elements

Danger

Hazard statements

Harmful if swallowed.
Harmful if inhaled.
Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.

**Precautionary Statements - Prevention**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection and face protection.
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid breathing dust, fume, gas, mist, vapors and spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor.

Skin

IF ON SKIN: Wash with plenty of water and soap.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice and attention.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
Rinse mouth.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

Unknown acute toxicity

- 44 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 51 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available.

Other information

May be harmful in contact with skin. Toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Phenol, styrenated	61788-44-1	25 - 40	-	-
Quartz	14808-60-7	20 - 40	-	-
1,3-Bis(aminomethyl)cyclohexane	2579-20-6	10 - 20	-	-
Glass, oxide	65997-17-3	5 - 15	-	-
Ceramic materials and wares, chemicals	66402-68-4	5 - 10	-	-
Cyclohexanamine, 4,4'-methylenebis-	1761-71-3	5 - 10	-	-
1-Piperazineethanamine	140-31-8	5 - 15	-	-
Salicylic acid	69-72-7	1 - 5	-	-

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures**Description of first aid measures**

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Get immediate medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms	Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in breathing.
Effects of Exposure	May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility.

Indication of any immediate medical attention and special treatment needed

Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.
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5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	No information available.
Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by skin contact.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.
Other information	Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes. Avoid breathing vapors or mists.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.
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8. Exposure controls/personal protection

Control Parameters

Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 50 µg/m ³ : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust
Glass, oxide 65997-17-3	TWA: 1 fiber/cm ³ respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m ³ inhalable particulate matter	-	-
Ceramic materials and wares, chemicals 66402-68-4	TWA: 5 mg/m ³ Zr TWA: 0.02 mg/m ³ Mn respirable particulate matter TWA: 0.1 mg/m ³ Mn inhalable particulate matter STEL: 10 mg/m ³ Zr	TWA: 5 mg/m ³ Zr (vacated) TWA: 5 mg/m ³ Zr (vacated) STEL: 10 mg/m ³ Zr Ceiling: 5 mg/m ³ Mn (vacated) Ceiling: 5 mg/m ³	TWA: 1 mg/m ³ ; Mn TWA: 5 mg/m ³ ; except Zirconium tetrachloride Zr STEL: 3 mg/m ³ Mn STEL: 10 mg/m ³ Zr IDLH: 500 mg/m ³ Mn IDLH: 25 mg/m ³ Zr

Chemical name	Alberta	British Columbia	Ontario	Quebec
Quartz 14808-60-7	TWA: 0.025 mg/m ³ ; respirable particulate	TWA: 0.025 mg/m ³ ; respirable	TWA: 0.10 mg/m ³ ; respirable fraction	TWAEV: 0.1 mg/m ³ ; respirable dust
Glass, oxide 65997-17-3	TWA: 5 mg/m ³ ; total particulate TWA: 1 fibre/cm ³ ;	TWA: 1 fibre/cm ³ ; TWA: 5 mg/m ³ ; inhalable	TWA: 1 fibre/cm ³ ; respirable TWA: 5 mg/m ³ ; inhalable fraction	TWAEV: 1 fibre/cm ³ ; respirable TWAEV: 5 mg/m ³ ; inhalable aerosol fraction
Ceramic materials and wares, chemicals 66402-68-4	TWA: 5 mg/m ³ ; TWA: 0.2 mg/m ³ ; STEL: 10 mg/m ³ ;	TWA: 5 mg/m ³ ; TWA: 0.02 mg/m ³ ; respirable TWA: 0.1 mg/m ³ ; inhalable STEL: 10 mg/m ³ ; Adverse reproductive effect	TWA: 5 mg/m ³ ; TWA: 0.02 mg/m ³ ; respirable particulate matter TWA: 0.1 mg/m ³ ; inhalable particulate matter STEL: 10 mg/m ³ ;	TWAEV: 0.2 mg/m ³ ; inhalable aerosol fraction TWAEV: 0.05 mg/m ³ ; respirable aerosol fraction TWAEV: 5 mg/m ³ ; STEV: 10 mg/m ³ ;

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Quartz	TWA: 0.025 mg/m ³ ; respirable particulate matter	TWA: 0.025 mg/m ³ ; respirable fraction	TWA: 0.025 mg/m ³ ; respirable particulate matter	TWA: 0.025 mg/m ³ ; respirable particulate matter

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Quartz	TWA: 0.05 mg/m ³ ; respirable fraction	TWA: 0.025 mg/m ³ ; respirable particulate matter	TWA: 0.05 mg/m ³ ; respirable fraction	TWA: 300 particle/mL;
Glass, oxide				TWA: 30 mppcf; dust or fibrous TWA: 10 mg/m ³ ; dust or fibrous

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Appearance Paste
 Physical state Liquid
 Color No information available
 Odor (includes odor threshold) No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No data available
Boiling point (or initial boiling point or boiling range)		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Flash point	> 100 °C / 212 °F	
Autoignition temperature		No data available
Decomposition temperature		No data available
SADT (°C)		No data available
pH		No data available
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Solubility		No data available
Water solubility		No data available
Partition coefficient n-octanol/water (log value)		No data available
Vapor pressure (includes evaporation rate)		No data available
Evaporation rate		No data available
Density and/or relative density	> 1	
Bulk density		No data available
Liquid Density		No data available
Relative vapor density		No data available
Particle characteristics		

Particle Size
Particle Size DistributionNo data available
No data available**Other information**

Molecular weight	No information available
VOC content	0.5%, as applied
	0.1 lb/gal, as applied
Softening point	No information available

Information with regard to physical hazard classes**Explosives**

Explosive properties No information available

Oxidizing properties No information available**10. Stability and reactivity****Reactivity** None under normal use conditions.**Chemical stability** Stable under normal conditions.**Possibility of hazardous reactions** None under normal processing.**Conditions to avoid** Excessive heat. Incompatible materials.**Incompatible materials** Strong acids, Strong bases, Strong oxidizing agents, Aldehydes, Halogenated compounds.**Hazardous decomposition products** None known based on information supplied.**11. Toxicological information****Information on likely routes of exposure****Product Information****Inhalation** May cause irritation of respiratory tract (based on components). Harmful by inhalation. Specific test data for the substance or mixture is not available.**Eye contact** Causes serious eye damage. May cause irreversible damage to eyes. Specific test data for the substance or mixture is not available.**Skin contact** Causes skin irritation (based on components). May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Specific test data for the substance or mixture is not available.**Ingestion** Harmful if swallowed (based on components). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Specific test data for the substance or mixture is not available.**Symptoms related to the physical, chemical and toxicological characteristics****Symptoms** Redness. Burning. May cause blindness. Itching. Rashes. Hives. May cause redness and tearing of the eyes. Coughing and/ or wheezing.**Acute toxicity** Harmful if swallowed. Harmful by inhalation.**Numerical measures of toxicity**

The following ATE values have been calculated for the mixture:

ATEmix (oral)	537.8 mg/kg
ATEmix (dermal)	2625.5 mg/kg
ATEmix (inhalation-dust/mist)	2.04 mg/l

Unknown acute toxicity

44 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

51 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Phenol, styrenated	2100 - 6700 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	> 4.92 mg/L (mist) (No mortality)
1,3-Bis(aminomethyl)cyclohexane	200 - 2000 mg/kg (Rat)	= 1700 mg/kg (Rabbit)	-
Ceramic materials and wares, chemicals	-	> 2500 mg/kg (Rabbit)	> 2.3 mg/L (aerosol) (No mortality)
Cyclohexanamine, 4,4'-methylenebis-	= 380 mg/kg (Rat)	= 2110 mg/kg (Rabbit)	-
1-Piperazineethanamine	= 2140 µL/kg (Rat)	= 866 mg/kg (Rabbit)	> 890 ppm (4.7 mg/L) (mist) (No mortality)
Salicylic acid	= 891 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 0.9 mg/L (Rat) 1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes skin irritation. Classification based on data available for ingredients.
Serious eye damage/eye irritation	Causes burns. Causes serious eye damage. Classification based on data available for ingredients.
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	No information available.
Carcinogenicity	Based on available data, the classification criteria are not met. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Quartz 14808-60-7	A2 A2 - Suspected Human Carcinogen	Group 1	Known	X
Glass, oxide 65997-17-3	A4 - Not Classifiable as a Human Carcinogen (listed under Synthetic vitreous fibers)	Group 3	-	-
Ceramic materials and wares, chemicals 66402-68-4	A4 - Not Classifiable as a Human Carcinogen	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected human carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to humans

Group 3 - Unclassifiable as to carcinogenicity in humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Occupational Safety and Health Administration of the US Department of Labor

X - Present

Reproductive toxicity	Suspected of damaging fertility or the unborn child. Classification based on data available for ingredients.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. Ecological information

Ecotoxicity Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Phenol, styrenated 61788-44-1	3.14 mg/L/72hr (Green algae)	14.8 mg/L (Zebra fish)	-	$\geq 1, \leq 10$ mg/L (Daphnia magna)
1-Piperazineethanamine 140-31-8	EC50: =495mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 1950 - 2460mg/L (96h, Pimephales promelas) LC50: >1000mg/L (96h, Poecilia reticulata) LC50: >=100mg/L (96h, Oncorhynchus mykiss)	-	EC50: =32mg/L (48h, Daphnia magna)
Salicylic acid 69-72-7	-	-	-	EC50: =870mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation**Component Information**

Chemical name	Partition coefficient
Phenol, styrenated 61788-44-1	3.13
1,3-Bis(aminomethyl)cyclohexane 2579-20-6	0.783
Cyclohexanamine, 4,4'-methylenebis- 1761-71-3	2.2
1-Piperazineethanamine 140-31-8	-1.48
Salicylic acid 69-72-7	2.25

Other adverse effects No information available.

Chemical name	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very	EU - REACH (1907/2006) - Endocrine Disruptor Assessment List of
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	High Concern (SVHC) for Authorisation	Substances
Phenol, styrenated	-	Endocrine disrupting properties

13. Disposal considerations

Disposal methods

Waste from residues/unused products	Dispose of in accordance with federal, state and local regulations.
Contaminated packaging	Do not reuse empty containers.
California waste information	This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. Transport information

Note: This material meets the UN/IMDG criteria as a marine pollutant. Although not required, this may also be classified as a marine pollutant in the US.

DOT

UN number or ID number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Special Provisions	8, 146, 173, 335, 441, IB3, T4, TP1, TP29
DOT Marine Pollutant	M
Marine pollutant	Phenol, styrenated
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Phenol, styrenated), 9, III, Marine pollutant

TDG

UN number or ID number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Marine pollutant	Phenol, styrenated.
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Phenol, styrenated), 9, III

IATA

UN number or ID number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
IATA Technical Name	Phenol, styrenated
Transport hazard class(es)	9
Packing group	III
Environmental hazards	Yes
Special Provisions	A97, A158, A197, A215
ERG Code	9L
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Phenol, styrenated), 9, III

IMDG

UN number or ID number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Technical Name	Phenol, styrenated

Transport hazard class(es)	9
Packing group	III
Marine pollutant indicator	M
Marine pollutant name	Phenol, styrenated
Special Provisions	274, 335, 969
EmS-No.	F-A S-F
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Phenol, styrenated), 9, III, Marine pollutant

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Ceramic materials and wares, chemicals - 66402-68-4	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ceramic materials and wares, chemicals 66402-68-4	-	X	-	-

CAA (Clean Air Act)

This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

Chemical name	Hazardous air pollutants (HAPs)	Ozone-depleting substances (ODS)
Ceramic materials and wares, chemicals 66402-68-4	Present	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Quartz - 14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Quartz 14808-60-7	X	X	X
Ceramic materials and wares, chemicals 66402-68-4	X	-	X
1-Piperazineethanamine 140-31-8	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 3	Flammability 1	Instability 2	Special hazards -
HMIS	Health hazards 3 *	Flammability 1	Physical hazards 2	Personal protection B

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
GHS	Globally Harmonized System
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
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
KECI	Korean 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
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NTP	National Toxicology Program (United States)
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
OSHA	Occupational Safety and Health Administration of the US Department of Labor
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitizer
RS	Respiratory Sensitizer
S	Sensitizer
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption

Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
U.S. Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

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Disclaimer

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End of Safety Data Sheet