

Preparation Date: 01/01/2019

Revision Date: N/A

Revision Number: N/A

1. IDENTIFICATION

Product identifier

Product code: C3990
Product Name: FORMIC ACID, 96 PERCENT, REAGENT, ACS

Other means of identification

Synonyms: Acide formique [French]
Acido formico [Italian]
Ameisensäure [German]
Aminic acid
Formylic acid
Hydrogen carboxylic acid
Kwas metaniowy [Polish]
Kyselina mravenci [Czech]
Methanoic acid
Mierenzuur [Dutch]

CAS #: 64-18-6
RTECS # LQ4900000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Prevents corrosion of pipe, corrosion inhibitor; fumigants, silvering glass; solvents for perfumes; lacquers; electroplating; cellulose formate; ore flotation; vinyl resin plasticizers; acidulant in dyeing of natural and synthetic fibers, leather tanning; coagulating latex in rubber production; metals salts made from formic acid: nickel, cadmium, and potassium formates. Insecticide. Refrigerant. Antiseptic. Food preservative. Feed additive. Flavoring ingredient.

Uses advised against No information available

Supplier: Dawn Scientific Inc
121 Liberty Street, Metuchen, NJ, 08840
Tel : 732-902-6300 | Fax : 973-802-1005
sales@dawnscientific.com | www.dawnscientific.com

Emergency telephone number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

	Category 4
Skin corrosion/irritation	Category 1Sub-category A
Serious eye damage/eye irritation	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

Harmful if swallowed

Causes severe skin burns and eye damage

Flammable liquid and vapor



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

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

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

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see .? on this label)

In case of fire: Use CO2, dry chemical, or foam to extinguish.

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/physician.

II contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Formic Acid 64-18-6	64-18-6	85-96	*
Water 7732-18-5	7732-18-5	4-15	*

4. FIRST AID MEASURES

First aid measures

General Advice:

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact:

Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.

Eye Contact:

Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms

Severe skin and eye irritation or burns. Irritating to respiratory system. May cause chemical burns to the respiratory tract. Dyspnea (Difficulty breathing and shortness of breath). Central nervous system effects. Dizziness. Headache. Somnolence. May cause pulmonary edema. Causes digestive (gastrointestinal) tract irritation. May cause gastrointestinal (digestive) tract burns. May cause salivation. May cause difficulty swallowing. Abdominal pain. May cause nausea and vomiting. May cause diarrhea. May affect the liver. It may affect the kidneys.

Indication of any immediate medical attention and special treatment needed

Notes to Physician:

Treat symptomatically

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:

Dry chemical. Carbon dioxide (CO₂). Water spray mist or foam. Alcohol-resistant foam.

Unsuitable Extinguishing Media:

Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Hazardous Combustion Products:

Carbon monoxide

Specific hazards:

Flammable
May be ignited by heat, sparks or flames
Container explosion may occur under fire conditions or when heated
Fire may produce irritating and/or toxic gases
Vapors may form explosive mixtures with air
Contact with metals may evolve flammable hydrogen gas

Special Protective Actions for Firefighters

Specific Methods:

For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.

Special Protective Equipment for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. All equipment used when handling the product must be grounded. Take precautionary measures against static discharges.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment

Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up

Use clean non-sparking tools to collect absorbed material. Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not ingest. Do not smoke. Keep away from heat and sources of ignition. Use only in well-ventilated areas. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep in a cool, well-ventilated place. Keep away from heat and sources of ignition. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Oxidizing agents. Organic materials. Acids. Bases. Alkalies. Powdered metals. Aluminum.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Formic Acid 64-18-6	5 ppm TWA 9 mg/m ³ TWA	= 5 ppm TWA	= 10 ppm STEL	None
Water 7732-18-5	None	None	None	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Formic Acid 64-18-6	= 5 ppm TWA = 9.4 mg/m ³ TWA	= 5 ppm TWA = 10 ppm STEL	5 ppm TWA	5 ppm TWA EV 9.4 mg/m ³ TWA EV 10 ppm STEV 19 mg/m ³ STEV
Water 7732-18-5	None	None	None	None

Australia and Mexico

Components	Australia	Mexico
Formic Acid 64-18-6	19 mg/m ³ STEL 10 ppm STEL 5 ppm TWA 9.4 mg/m ³ TWA	= 5 ppm TWA = 9 mg/m ³ TWA
Water 7732-18-5	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Eye protection:	Goggles
Skin and body protection:	Chemical resistant apron Long sleeved clothing Gloves
Respiratory protection:	Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Appearance: Clear.	Color: Colorless.
Odor: Pungent. Penetrating.	Taste Sour.	Molecular/Formula weight: 46.03
Formula: CH ₂ O ₂	Flammability: No information available	Flashpoint (°C/°F): 50-69°C/ 122-156°F
Flash point (°C): 50°C	Flash Point Tested according to: Closed cup	Autoignition Temperature (°C/°F): 539°C/ 1002.2°F
Lower Explosion Limit (%): 14.9-18	Upper Explosion Limit (%): 47.6-57	pH: No information available
Melting point/range(°C/°F): 8.4°C/ 47.1°F	Boiling point/range(°C/°F): 101°C/ 213.3°F	Decomposition temperature(°C/°F): No information available
Bulk density: No information available	Density (g/cm³): 1.22 @ 20 deg. C	Specific gravity: 1.22
Vapor pressure @ 20°C (kPa): 4.7	Evaporation rate: 2.1 (buty acetate = 1)	Vapor density: 1.59
VOC content (g/L): No information available	Odor threshold (ppm): 0.625	Partition coefficient (n-octanol/water): -0.54
Viscosity: No information available	Miscibility: Miscible with water Miscible with alcohol Miscible with Ether Miscible with Acetone Miscible with Ethyl Acetate Miscible with Ethanol Miscible with Methanol	Solubility: Partially soluble in Benzene, Toluene, Xylene

10. STABILITY AND REACTIVITY

Reactivity

10. STABILITY AND REACTIVITY

Highly reactive with oxidizing agents

Reactive with organic materials, metals, acids, bases

It can react vigorously, violently or explosively with oxidizers

Formic acid is a strong reducing agent. Decomposes slowly during storage! Vent container at least monthly. Formic acid may react with alkalis and oxidizing materials such as peroxides, nitric acid, and chromic acid. It is also incompatible with concentrated sulfuric acid, Nitromethane, finely powdered metals, permanganates, strong bases, oxidizing agents

Formic acid forms explosive reactions with the following: Furfuryl alcohol, Hydrogen Peroxide + organic matter; Nitromethane, P₂O₅,

Thallic nitrate trihydrate + vanillin, and oxidizing agents

Explosive decomposition of Formic Acid on clean nickel.

Aluminum reduces formic acid (itself a reductant) with incandescence.

Contact with metals may evolve flammable hydrogen gas

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials.

Incompatible Materials: Oxidizing agents. Organic materials. Acids. Bases. Alkalis. Powdered metals. Aluminum.

Hazardous decomposition products: Carbon oxides.

Other Information

Corrosivity: Highly corrosive in presence of copper
Corrosive in presence of stainless steel (304)
Non-corrosive in presence of stainless steel (316)
Non-corrosive in the presence of glass
Non-corrosive in presence of aluminum

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Skin. Eyes. Inhalation. Ingestion.

Acute Toxicity

Component Information

Formic Acid - 64-18-6

LD50/oral/rat = 1100 mg/kg Oral LD50 Rat
730 mg/kg [RTECS]

LD50/oral/mouse = 700 mg/kg

LD50/dermal/rat = No information available

LD50/dermal/rabbit = No information available

LC50/inhalation/rat = 7400 mg/m³ Inhalation LC50 Rat 4 hr [RTECS]

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = No information available

Water - 7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rat = No information available
LD50/dermal/rabbit = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

LD50/oral/rat =
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = 6200 mg/m³
VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:	Corrosive. Causes skin irritation. Causes skin burns. May cause erythema (redness) and edema (raised skin). May cause blistering. May be absorbed through the skin.
Eye Contact:	Corrosive. Causes severe eye irritation and possible burns. Lachrymator (substance which increases the flow of tears). May cause corneal edema, ulceration and scarring. Vapors may cause itching, burning, and swelling of the eyes.
Inhalation	Causes difficulty breathing, shortness of breath, coughing, respiratory tract irritation and burns. Vapors may also affect behavior/central nervous system (dizziness, headache, somnolence). May also affect the urinary system (changes in urine composition). May cause nausea and vomiting. May cause pulmonary edema..
Ingestion	Harmful if swallowed. Causes digestive tract irritation and burns with difficulty swallowing, salivation, abdominal pain, a burning sensation in the mouth and throat, nausea, vomiting, diarrhea. May produce corrosive ulceration and bleeding, and necrosis of the gastrointestinal tract. May also affect the cardiovascular system (circulatory collapse -shock), urinary system (kidneys), blood (hemolysis with or without anemia), behavior/central nervous system (somnolence), respiration (dyspnea), and metabolism (loss appetite/weight loss, metabolic acidosis).
Aspiration hazard	No information available

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

Skin: Prolonged or repeated skin contact may cause dermatitis.
 Inhalation: Prolonged or repeated inhalation may cause bronchitis with cough, phlegm and shortness of breath. It may affect the brain and may affect olfaction. May affect the liver and urinary system and cause liver and kidney damage.
 Ingestion: Prolonged or repeated ingestion may may cause weight loss, and may affect the liver (liver function tests impaired), kidneys, spleen.

Sensitization: No information available

Mutagenic Effects: Mutations in microorganisms
 Experiments with bacteria and/or yeast have shown mutagenic effects
 Cytogenic analysis - hamster ovary

Carcinogenic effects: Not considered carcinogenic

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Formic Acid	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Water	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available
STOT - repeated exposure No information available
Target Organs: Kidneys. Lungs. Respiratory system. Skin. Eyes.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Harmful to aquatic organisms.

Formic Acid - 64-18-6

Freshwater Algae Data: 25 mg/L EC50 *Desmodesmus subspicatus* 96 h
 26.9 mg/L EC50 *Desmodesmus subspicatus* 72 h
Freshwater Fish Species Data: 175 mg/L LC50 *Lepomis macrochirus* 24 h static 1
Water Flea Data: 120 mg/L EC50 *Daphnia magna* 48 h
 138 - 165.6 mg/L EC50 *Daphnia magna* 48 h

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Formic Acid	None	None	None	U123 Corrosive waste, Toxic waste
Water	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1779
Proper Shipping Name: Formic acid (Solution)
Hazard Class: 8
Subsidiary Risk: 3
Packing Group: II
ERG No: 153
Marine Pollutant No data available
DOT RQ (lbs): No information available
Symbol(s): R5

TDG (Canada)

UN-No: UN1779
Proper Shipping Name: Formic acid (Solution)
Hazard Class: 8
Subsidiary Risk: (3)
Packing Group: II
Description: No information available

ADR

UN-No: UN1779
Proper Shipping Name: Formic acid (Solution)
Hazard Class: 8
Packing Group: II
Subsidiary Risk: 3
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: UN1779
Proper Shipping Name: Formic acid (Solution)
Hazard Class: 8
Subsidiary Risk: 3
Packing Group: II
Description: No information available
IMDG Page: No information available
Marine Pollutant No information available

14. TRANSPORT INFORMATION

EMS: F-E
 MFAG: No information available
 Maximum Quantity: No information available

RID

UN-No: UN1779
 Proper Shipping Name: Formic acid (Solution)
 Hazard Class: 8
 Subsidiary Risk: 3
 Packing Group: II
 Classification Code: No information available
 Description: No information available

ICAO

UN-No: UN1779
 Proper Shipping Name: Formic acid (Solution)
 Hazard Class: 8
 Subsidiary Risk: 3
 Packing Group: II
 Description: No information available

IATA

UN-No: UN1779
 Proper Shipping Name: Formic acid (Solution)
 Hazard Class: 8
 Subsidiary Risk: 3
 Packing Group: II
 ERG Code: 8L
 Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Formic Acid	Present	Present KE-17233	Present	Present (2)-670	Present	Present	Present 200-579-1
Water	Present	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2

U.S. Regulations

Formic Acid

Massachusetts RTK: Present
 New Jersey RTK Hazardous Substance List: 0948
 New Jersey (EHS) List: 0948 500 lb TPQ
 New Jersey - Discharge Prevention - List of Hazardous Substances: Present
 Pennsylvania RTK: Environmental hazard
 Pennsylvania RTK - Environmental Hazard List Present
 Pennsylvania RTK - Special Hazardous Substances Present
 Minnesota - Hazardous Substance List: Present
 New York Release Reporting - List of Hazardous Substances:
 = 5000 lb RQ
 Louisiana Reportable Quantity List for Pollutants: Listed
 California Directors List of Hazardous Substances: Present
 FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 186.1316

FDA - Direct Food Additives 21 CFR 172.515
 FDA - 21 CFR - Total Food Additives 172.515 172.723 186.1316 573.480

Formic Acid

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Formic Acid	Not Listed	Not Listed	Not Listed	Not Listed
Water	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Formic Acid	= 2270 kg final RQ	None	None	None	1.0 % de minimis concentration
Water	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Formic Acid	Not Applicable	Not Applicable
Water	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

B3 Combustible liquid

E Corrosive material

Formic Acid

B3 E including 85%, 90%

E 80%

B3 E including 85%, 90%

Water

Uncontrolled product according to WHMIS classification criteria

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Formic Acid	1 %

Inventory

Components	Canada (DSL)	Canada (NDSL)
Formic Acid	Present	Not Listed
Water	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Formic Acid	Not listed	Not listed
Water	Not listed	Not listed

EU Classification

R-phrase(s)

R35 - Causes severe burns.

S -phrase(s)

S23 - Do not breathe gas/fumes/vapor/spray.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 1/2 - Keep locked up and out of the reach of children.

Components	Classification	Concentration Limits:	Safety Phrases
Formic Acid	C; R35	90%≤C: C; R35 10%≤C<90%: C; R34 2%≤C<10%: Xi; R36/38	S1/2 S23 S26 S45
Water		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

C - Corrosive.



16. OTHER INFORMATION

Preparation Date: 01/01/2019

Revision Date: N/A

Prepared by: -

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. DSI Chemicals & Laboratory Products, assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Dawn Scientific Inc assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet