Safety Data Sheet

According to U.S.A. Federal Hazcom 2012 and Canadian HPR - WHMIS 2015

1. Identification

1.1. Product identifier

Code	**MI590A-0**
Product name	**Peroxide Reagent A (test vial)**

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

Intended use	**Determination of Peroxides in Edible Oil.**

1.3. Details of the supplier of the safety data sheet

Name	**Milwaukee Electronics Kft.**
Full address	**Alsókikötő sor 11.**
District and Country	**H6726 Szeged** **Hungary**
	Tel. +36-62-428-050 **Fax +36-62-428-051**
e-mail address of the competent person responsible for the Safety Data Sheet	**info@milwaukeeinst.com**
Product distribution by:	**Milwaukee Instruments, Inc.- 2950 Business Park Drive - Rocky Mount - NC 27804 - U.S.A. - Technical Service Contact Information: +1 252 443 3630, fax number 252.443.1937 - e-mail: sales@milwaukeeinstruments.com**

1.4. Emergency telephone number

For urgent inquiries refer to	**USA Emergency Contact Information: +1-800-424-9300 - CHEMTREC 24 hours/365 days**

2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classification and Hazard Statement

Substance or mixture corrosive to metals, category 1	May be corrosive to metals.
Carcinogenicity, category 2	Suspected of causing cancer.
Reproductive toxicity, category 2	Suspected of damaging fertility or the unborn child.
Acute toxicity, category 3	Toxic if inhaled.
Acute toxicity, category 4	Harmful if swallowed.
Specific target organ toxicity - repeated exposure, category 1	Causes damage to organs through prolonged or repeated exposure.
Skin corrosion, category 1	Causes severe skin burns and eye damage.
Serious eye damage, category 1	Causes serious eye damage.

Hazard pictograms:

Signal words: Danger

Hazard statements:

H290	May be corrosive to metals.
H351	Suspected of causing cancer.

2. Hazards identification ... / >>

H361	Suspected of damaging fertility or the unborn child.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H372	Causes damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.

Precautionary statements:
Prevention:

P201	Obtain special instructions before use.
P280	Wear protective gloves / protective clothing / eye protection / face protection.

Response:

P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice / attention.
P310	Immediately call a POISON CENTER or doctor.
P391	Collect spillage.

Storage:

P404	Store in a closed container.

Disposal:

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2.2. Other hazards

Information not available

3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification		**x = Conc. %**	**Classification:**
ACETIC ACID			
CAS	*64-19-7*	50 ≤ x < 80	**Flammable liquid, category 3 H226, Substance or mixture corrosive to metals, category 1 H290, Skin corrosion, category 1A H314, Serious eye damage, category 1 H318**
EC	*200-580-7*		
INDEX	*607-002-00-6*		
CHLOROFORM			
CAS	*67-66-3*	35 ≤ x < 50	**Carcinogenicity, category 2 H351, Reproductive toxicity, category 2 H361, Acute toxicity, category 3 H331, Acute toxicity, category 4 H302, Specific target organ toxicity - repeated exposure, category 1 H372, Eye irritation, category 2 H319, Skin irritation, category 2 H315**
EC	*200-663-8*		
INDEX	*602-006-00-4*		

* There is a batch to batch variation.

The full wording of hazard (H) phrases is given in section 16 of the sheet.

4. First-aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

ACETIC ACID

4. First-aid measures ... / >>

ACETIC ACID 100%: Irritation and corrosion, bronchitis, Shortness of breath, gastric spasms, Nausea, Vomiting, Circulatory collapse, shock, Risk of corneal clouding. Risk of blindness!.

CHLOROFORM
Irritant effects, Cough, Shortness of breath, respiratory arrest, Dizziness, narcosis, agitation, spasms, inebriation, Nausea, Vomiting, Stomach/intestinal disorders, cardiovascular disorders, Headache, ataxia (impaired locomotor coordination). Drying-out effect esulting in rough and chapped skin.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

5. Fire-fighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

ACETIC ACID
ACETIC ACID 100%: Combustible. Vapours 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. Fire may cause evolution of: Acetic acid vapours.

CHLOROFORM
Not combustible. Ambient fire may liberate hazardous vapours. Fire may cause evolution of: Hydrogen chloride gas, Phosgene.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

USA	NIOSH-REL	NIOSH publication No. 2005-149, 3th printing, 2007.
USA	OSHA-PEL	Occupational Exposure Limits - Limits for Air Contaminants TABLE Z-1-1910.1000.
USA	CAL/OSHA-PEL	California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits (PELs).
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

ACETIC ACID

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU	25	10	50	20
TLV-ACGIH	-		10		15
OSHA	USA	25	10		
CAL/OSHA	USA	25	10	37 (C)	40 (C)
NIOSH	USA	25	10	37	15

CHLOROFORM

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU	10	2		
TLV-ACGIH	-		10		
OSHA	USA			240 (C)	50 (C)
CAL/OSHA	USA	9.78	2		
NIOSH	USA			9.78	2

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

ACETIC ACID
Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms UNI EN 482 and UNI EN 689.

CHLOROFORM
Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms UNI EN 482 and UNI EN 689.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must comply with current regulations.
HAND PROTECTION
Protect hands with category III work gloves (OSHA 29 CFR 1910.138).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

8. Exposure controls/personal protection ... / >>

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.
SKIN PROTECTION
Wear category I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.
EYE PROTECTION
Wear airtight protective goggles (OSHA 29 CFR 1910.133).
RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose limit of use will be defined by the manufacturer (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84, OSHA 29 CFR 1910.134.
ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value		Information
Appearance	liquid		
Colour	colourless		
Odour	pungent		
Odour threshold	Not available		
pH	< 1		
Melting point / freezing point	Not available		
Initial boiling point	60 °C	(140 °F)	
Boiling range	Not available		
Flash point	Not applicable		
Evaporation rate	Not available		
Flammability (solid, gas)	Not available		
Lower inflammability limit	Not available		
Upper inflammability limit	Not available		
Lower explosive limit	Not available		
Upper explosive limit	Not available		
Vapour pressure	61.26 mmHg		
Vapour density	Not available		
Relative density	1.26		
Solubility	soluble in water		
Partition coefficient: n-octanol/water	Not available		
Auto-ignition temperature	Not available		
Decomposition temperature	Not available		
Viscosity	Not available		
Explosive properties	not applicable		
Oxidising properties	not applicable		

9.2. Other information

Information not available

10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

ACETIC ACID
ACETIC ACID 100%: Vapour/air-mixtures are explosive at intense warming.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10. Stability and reactivity ... / >>

CHLOROFORM
Heat-sensitive. Sensitivity to light. Stabilizer ethanol.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

ACETIC ACID
ACETIC ACID 100%: Risk of explosion on contact with: chromium (IV) oxide, potassium permanganate, sodium peroxide, perchloric acid, phosphorus chloride, hydrogen peroxide. Can react dangerously with: alcohols, bromine pentafluoride, chlorosulphuric acid, dichromate-sulphuric acid, ethane diamine, ethylene glycol, potassium hydroxide, strong bases, sodium hydroxide, strong oxidising agent, nitric acid, ammonium nitrate, potassium tert-butoxide, oleum. Forms explosive mixtures with air.

CHLOROFORM
Risk of explosion with: Ammonia, Amines, nitrogen oxides, bases, Oxygen, alkali amides, organic nitro compounds, Alcohols, alkali hydroxides, strong alkalis, Fluorine, peroxi compounds, Alkaline earth metals, Alkali metals, Powdered metals, Methanol with alcoholates, Methanol with strong alkalis, Iron in powder form, various alloys sensitive to shock, Methanol with Sodium hydroxide, magnesium in powder form, Oxygen with alkali compounds, Aluminium in powder form, Acetone with alkali compounds, Potassium sensitive to shock, sodium sensitive to shock. Violent reactions possible with: phosphines, bis(dimethylamino)dimethyl tin, nonmetallic hydrogen compounds, Powdered metals, Light metals, Ketones, mineral acids, Strong oxidizing agents, semimetallic hydrogen compounds.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

ACETIC ACID
ACETIC ACID 100%: Avoid exposure to sources of heat and naked flames.

10.5. Incompatible materials

ACETIC ACID
ACETIC ACID 100%: Carbonates, hydroxides, many oxides and phosphates. Oxidising substances and bases.

CHLOROFORM
Rubber, various plastics.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

ACETIC ACID
ACETIC ACID 100% - Acute oral toxicity, Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach., Nausea, Vomiting, Risk of aspiration upon vomiting., Pulmonary failure possible after aspiration of vomit - Acute inhalation toxicity, LCLO Rat: 39.95 mg/l, 4 h, Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, Pneumonia, bronchitis, Inhalation may lead to the formation of oedemas in the respiratory tract., Symptoms may be delayed - Skin irritation, Rabbit, Result: Causes burns - Eye irritation, Rabbit, Result: Causes serious eye damage. Risk of blindness! Risk of corneal clouding. Germ cell mutagenicity, Genotoxicity in vitro, Ames test, Salmonella typhimurium, Result: negative - Mutagenicity (mammal cell test): chromosome aberration, Result: negative - Teratogenicity, Did not show teratogenic effects in animal experiments .

CHLOROFORM
Acute oral toxicity, Symptoms: Nausea, Vomiting, Risk of aspiration upon vomiting, Aspiration may cause pulmonary oedema and pneumonitis. absorption - Acute inhalation toxicity, Acute toxicity estimate: 0.5 mg/l; aerosol, Symptoms: Cough, Shortness of breath, Possible damages: mucosal irritations, absorption - Acute dermal toxicity: Skin irritation, Rabbit, Result: slight irritation. Drying-out effect resulting in rough and chapped skin. Causes skin irritation. Eye irritation. Causes serious eye irritation - CMR effects, Carcinogenicity: Suspected of causing cancer - Teratogenicity: Suspected of damaging the unborn child - Specific target organ toxicity, repeated exposure, Target Organs: Liver, Kidney, Causes damage to organs through prolonged or repeated exposure.

Metabolism, toxicokinetics, mechanism of action and other information

11. Toxicological information ... / >>

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

CHLOROFORM	
LD50 (Oral)	695 mg/kg Rat
LD50 (Dermal)	> 3980 mg/kg Rabbit
LC50 (Inhalation)	47.7 mg/l/4h Rat
ACETIC ACID	
LD50 (Oral)	3310 mg/kg Rat
LD50 (Dermal)	1060 mg/kg Rabbit
LC50 (Inhalation)	11.4 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Corrosive for the skin
Classification according to the experimental Ph value

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Suspected of causing cancer

Carcinogenicity Assessment:
67-66-3 CHLOROFORM
IARC:2B
NTP: Reasonably Anticipated

REPRODUCTIVE TOXICITY

Suspected of damaging fertility or the unborn child

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Causes damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

ACETIC ACID
ACETIC ACID 100%: Toxicity to algae, IC5 Scenedesmus quadricauda (Green algae): 4,000 mg/l, 16 h, (maximum permissible toxic concentration) (Lit.) - Toxicity to bacteria, EC5 Pseudomonas putida: 2,850 mg/l, 16 h, neutral (maximum permissible toxic concentration) (Lit.), microtox test EC50 Photobacterium phosphoreum: 11 mg/l, 15 min .

CHLOROFORM
Toxicity to daphnia and other aquatic invertebrates, EC5 E.sulcatum: > 6,560 mg/l; 72 h (maximum permissible toxic concentration) - Toxicity to algae, IC5 Scenedesmus quadricauda (Green algae): 1,100 mg/l; 8 d (maximum permissible toxic concentration) - Toxicity to bacteria, EC5 Pseudomonas putida: 125 mg/l; 16 h (maximum permissible toxic concentration), EC50 activated sludge: 1,010 mg/l; 3 h .

CHLOROFORM

LC50 - for Fish	18 mg/l/96h Lepomis macrochirus
EC50 - for Crustacea	79 mg/l/48h Daphnia magna

ACETIC ACID

LC50 - for Fish	> 300.8 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	> 300.82 mg/l/48h Daphnia magna

12.2. Persistence and degradability

ACETIC ACID
ACETIC ACID 100%: Biodegradability 99 %, 30 d, Readily biodegradable - 95 %; 5 d, Readily eliminated from water - Biochemical Oxygen Demand (BOD) 880 mg/g (5 d) - Ratio BOD/ThBOD BOD5 76 %.

CHLOROFORM
Biodegradability 0 %; 14 d. Not readily biodegradable.

CHLOROFORM

Solubility in water	8 mg/l

ACETIC ACID

Solubility in water	> 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

CHLOROFORM
Partition coefficient: n-octanol/water, log Pow: 2 (25 °C), (experimental). Bioaccumulation is not expected.

CHLOROFORM

Partition coefficient: n-octanol/water	2 Log Kow

ACETIC ACID

Partition coefficient: n-octanol/water	-0.17

12.4. Mobility in soil

12. Ecological information ... / >>

CHLOROFORM
Distribution among environmental compartments, Adsorption/Soil log Koc: 1.72, (experimental). Mobile in soils.

ACETIC ACID

Partition coefficient: soil/water 1.153

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

ACETIC ACID
ACETIC ACID 100%: Biological effects, Harmful effect due to pH shift. Caustic even in diluted form. Discharge into the environment must be avoided.

CHLOROFORM
Henry constant 14084 Pa*m³/mol, Method: (experimental), Distribution preferentially in air. Discharge into the environment must be avoided.

13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 2922

14.2. UN proper shipping name

ADR / RID: CORROSIVE LIQUID, TOXIC, N.O.S. (ACETIC ACID, CHLOROFORM, MIXTURE)
IMDG: CORROSIVE LIQUID, TOXIC, N.O.S. (ACETIC ACID, CHLOROFORM, MIXTURE)
IATA: CORROSIVE LIQUID, TOXIC, N.O.S. (ACETIC ACID, CHLOROFORM, MIXTURE)

14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8 (6.1)

IMDG: Class: 8 Label: 8 (6.1)

IATA: Class: 8 Label: 8 (6.1)

14.4. Packing group

ADR / RID, IMDG, IATA: II

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14. Transport information ... / >>

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 86 Special Provision: -	Limited Quantities: 1 L	Tunnel restriction code: (E)
IMDG:	EMS: F-A, S-B	Limited Quantities: 1 L	
IATA:	Cargo: Pass.: Special Instructions:	Maximum quantity: 30 L Maximum quantity: 1 L A3, A803	Packaging instructions: 855 Packaging instructions: 851

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

15. Regulatory information

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

U.S. Federal Regulations

TSCA:
All components are listed on TSCA Inventory.

Clean Air Act Section 112(b):
67-66-3 CHLOROFORM

Clean Air Act Section 602 Class I Substances:
No component(s) listed.

Clean Air Act Section 602 Class II Substances:
No component(s) listed.

Clean Water Act – Priority Pollutants:
67-66-3 CHLOROFORM

Clean Water Act – Toxic Pollutants:
67-66-3 CHLOROFORM

DEA List I Chemicals (Precursor Chemicals):
No component(s) listed.

DEA List II Chemicals (Essential Chemicals):
No component(s) listed.

EPA List of Lists:
313 Category Code:
67-66-3 CHLOROFORM

EPCRA 302 EHS TPQ:
67-66-3 CHLOROFORM

EPCRA 304 EHS RQ:
67-66-3 CHLOROFORM

CERCLA RQ:
64-19-7 ACETIC ACID
67-66-3 CHLOROFORM

EPCRA 313 TRI:
67-66-3 CHLOROFORM

RCRA Code:
67-66-3 CHLOROFORM

CAA 112 (r) RMP TQ:
67-66-3 CHLOROFORM

15. Regulatory information ... / >>

State Regulations

Massachussetts:

64-19-7	ACETIC ACID
67-66-3	CHLOROFORM

Minnesota:

64-19-7	ACETIC ACID
67-66-3	CHLOROFORM

New Jersey:

64-19-7	ACETIC ACID
67-66-3	CHLOROFORM

New York:

64-19-7	ACETIC ACID
67-66-3	CHLOROFORM

Pennsylvania:

64-19-7	ACETIC ACID
67-66-3	CHLOROFORM

California:

64-19-7	ACETIC ACID
67-66-3	CHLOROFORM

Proposition 65:

WARNING! This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm.

67-66-3	CHLOROFORM C/D

International Regulations

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

CHLOROFORM

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Candadian WHMIS

Information not available

16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H372	Causes damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.

LEGEND:
- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAA 112 ® RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112®)
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: EC Regulation 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule

16. Other information ... / >>

- EPA: US Environmental Protection Agency- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REL: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Comunication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachussetts 105 CMR Department of public health 670.000: "Right to Know"
- Minensota Chapter 5206 Departemnt Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the criteria set out in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200), unless otherwise indicated in sections 11 and 12.
The data for evaluation of chemical-physical properties are reported in section 9.
Changed TLVs in section 8.1 for following countries:
EU,

Changes to previous review:
The following sections were modified:

16. Other information ... / >>

01 / 02 / 03 / 04 / 05 / 08 / 09 / 10 / 11 / 12 / 13 / 15 / 16.