Printing date 26.06.2014 Revision: 26.06.2014

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

· 1.1 Product identifier

· Trade name: Oil of Galileo Thermometer

· CAS Number:

8008-20-6

· EC number:

232-366-4

· Index number:

649-404-00-4

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

No further relevant information available.

- · Application of the substance / the mixture Product Component
- · 1.3 Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier:

H-B Instrument – A Division of Bel-Art Products

102 West Seventh Avenue

Trappe, PA 19426 USA

Phone: (610) 489-5500

· 1.4 Emergency telephone number:

ChemTel Inc.

(800)255-3924, +1 (813)248-0585

2 Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The following classifications are applicable only to the general GHS regulations and not the specific CLP regulation: H227 - Combustible liquid.

H227: Combustible Liquid. (General GHS and USA only)



health hazard

Carc. 2 H351 Suspected of causing cancer.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



R65: Harmful: may cause lung damage if swallowed.

- · Information concerning particular hazards for human and environment: Not applicable.
- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The following classifications are applicable only to the general GHS regulations and not the specific CLP regulation: combustible liquid.

The substance is classified and labelled according to the CLP regulation.

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

· Hazard pictograms



GHS08

- · Signal word Danger
- · Hazard-determining components of labelling:

Kerosine (petroleum)

· Hazard statements

H227: Combustible Liquid. (General GHS and USA only)

H351 Suspected of causing cancer.

H304 May be fatal if swallowed and enters airways.

Precautionary statements

P281 Use personal protective equipment as required.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P331 Do NOT induce vomiting.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- · Hazard description:
- · WHMIS-symbols:

B3 - Combustible liquid

D2A - Very toxic material causing other toxic effects



· NFPA ratings (scale 0 - 4)



Health = 1 Fire = 2 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- * Indicates a long term health hazard from repeated or prolonged exposures.
- · HMIS Long Term Health Hazard Substances

Substance is not listed.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.

(Contd. on page 3)

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

· vPvB: Not applicable.

(Contd. of page 2)

3 Composition/information on ingredients

- · 3.1 Substances
- · CAS No. Description

8008-20-6 Kerosine (petroleum)

- · Identification number(s)
- · EC number: 232-366-4
- · Index number: 649-404-00-4

4 First aid measures

- · 4.1 Description of first aid measures
- · General information: Take affected persons out into the fresh air.
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Remove any clothing soiled by the product.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

A person vomiting while laying on their back should be turned onto their side.

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

Slight irritant effect on skin and mucous membranes.

Slight irritant effect on eyes.

Gastric or intestinal disorders when ingested.

Nausea

Cramp

Breathing difficulty

Coughing

Dizziness

· Hazards

Danger of pulmonary oedema.

Danger of impaired breathing.

Limited evidence of a carcinogenic effect.

Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed or in case of vomiting, danger of entering the lungs.

(Contd. on page 4)

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

(Contd. of page 3)

Later observation for pneumonia and pulmonary oedema.

Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

5 Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water
- · 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information No further relevant information available.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Particular danger of slipping on leaked/spilled product.

Keep away from ignition sources.

· 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Prevent from spreading (e.g. by damming-in or oil barriers).

Do not allow to penetrate the ground/soil.

· 6.3 Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Remove from the water surface (e.g. skim or suck off).

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· 7.1 Precautions for safe handling

Prevent formation of aerosols.

Avoid the formation of oil haze.

Avoid splashes or spray in enclosed areas.

(Contd. on page 5)

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

(Contd. of page 4)

Use only in well ventilated areas.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Flammable gas-air mixtures may form in empty receptacles.

Fumes can combine with air to form an explosive mixture.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Provide ventilation for receptacles.

Avoid storage near extreme heat, ignition sources or open flame.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

- · Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:		
	8008-20-6 Kerosine (petroleum)	
	REL (USA)	Long-term value: 100 mg/m³ Kerosine only
	TLV (USA)	Long-term value: 200 mg/m³ as total hydrocarbon vapor; Skin; P
	EL (Canada)	Long-term value: 200 mg/m³ Skin
	EV (Canada)	Long-term value: 200(G) mg/m³ as total hydrocarbon vapour. Skin

- · **DNELs** No further relevant information available.
- · PNECs No further relevant information available.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Respiratory protection:

Not required under normal conditions of use.

For spills, respiratory protection may be advisable.

(Contd. on page 6)

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

(Contd. of page 5)

Use suitable respiratory protective device when aerosol or mist is formed.

NIOSH or EN approved organic vapor respirator equipped with a dust/mist prefilter should be used.

· Protection of hands:

Not required under normal conditions of use.

Wear protective gloves to handle contents of damaged or leaking units.

· Eve protection:

Not required for normal handling. Wear protective eyewear while handling damaged or leaking product.



Safety glasses

· Body protection:

Not required under normal conditions of use.

Protection may be required for spills.

· Limitation and supervision of exposure into the environment

No further relevant information available.

· Risk management measures

See Section 7 for additional information.

No further relevant information available.

9 Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form:
Colour:
Colour:
Colourless
Odour:
Petroleum-like
Not determined.

pH-value:
Not determined.

· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:
Undetermined.

Flash point:
Flammability (solid, gaseous):
Auto/Self-ignition temperature:
Decomposition temperature:
Not determined.
Not determined.
Not determined.
Not determined.

• Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined. Upper: Not determined.

(Contd. on page 7)

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

(Contd. of page 6)

Vapour pressure: Not determined.
 Density at 20 °C: 0,8 g/cm³
 Relative density Not determined.
 Vapour density Not determined.
 Evaporation rate Not determined.

· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined. **Kinematic:** Not determined.

• 9.2 Other information No further relevant information available.

10 Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with oxidizing agents.

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.

Toxic fumes may be released if heated above the decomposition point.

- 10.4 Conditions to avoid Store away from oxidizing agents.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Slight irritant effect on skin and mucous membranes.
- · on the eye: Slight irritant effect on eyes.
- · Sensitization: No sensitizing effects known.
- · Subacute to chronic toxicity:

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

· Additional toxicological information:

Information is only applicable to product contents, and not to product as normally supplied. This information is applicable to damaged, leaking, or spilled product as contact with contents is possible under these conditions.

Suspected of causing cancer.

(Contd. on page 8)

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

(Contd. of page 7)

· Acute effects (acute toxicity, irritation and corrosivity):

Vapours have narcotic effect.

Danger through skin adsorption.

May be harmful if inhaled.

May be harmful if swallowed.

- · Repeated dose toxicity: May cause damage to organs through prolonged or repeated exposure.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

Carc. 2

12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

- 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark:

The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen. Due to mechanical actions of the product (e.g. agglutinations) damages may occur.

- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Product is recyclable as a waste oil. Deliver unused and/or contaminated product to waste oil collectors. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

(Contd. on page 9)

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

(Contd. of page 8)

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

14 Transport information

· 14.1 UN-Number

· DOT, ADR, ADN, IMDG, IATA Not Regulated

· 14.2 UN proper shipping name

· DOT, ADR, ADN, IMDG, IATA Not Regulated

· 14.3 Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA

· Class Not Regulated

· 14.4 Packing group

· DOT, ADR, IMDG, IATA Not Regulated

· 14.5 Environmental hazards:

· Marine pollutant: No

• 14.6 Special precautions for user Not applicable.

· 14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation":

15 Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

- · Proposition 65 (California):
- · Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

(Contd. on page 10)

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

(Contd. of page 9)

· Carcinogenic Categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· IARC (International Agency for Research on Cancer)

8008-20-6 Kerosine (petroleum)

2B

· TLV (Threshold Limit Value established by ACGIH)

8008-20-6 Kerosine (petroleum)

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· Canada

· Canadian Domestic Substances List (DSL)

Substance is listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

Substance is not listed.

· Canadian Ingredient Disclosure list (limit 1%)

Substance is not listed.

· Other regulations, limitations and prohibitive regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

· Substances of very high concern (SVHC) according to REACH, Article 57

Substance is not listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

Carc. 2: Carcinogenicity, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

(Contd. on page 11)

Printing date 26.06.2014 Revision: 26.06.2014

Trade name: Oil of Galileo Thermometer

(Contd. of page 10)

· Sources

SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com