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Version Number 3

Reviewed on 01/29/2019

- · Product identifier
- · Trade name: Isopropalin
- · Part number: PST-1475, PST-1475-10MG
- · CAS Number:
- 33820-53-0
- · EC number:
- 251-690-7
- · Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use
- Details of the supplier of the safety data sheet • Manufacturer/Supplier:
- Agilent Technologies, Inc. 5301 Stevens Creek Blvd. Santa Clara, CA 95051 USA
- · Information department:
- Telephone: 800-227-9770
- e-mail: pdl-msds_author@agilent.com • Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture

GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

- · Label elements
- GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms



- · Signal word Warning
- · Hazard statements
- Flammable liquid and vapor.
- · Precautionary statements
- 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.
- Wear protective gloves/protective clothing/eye protection/face protection.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- In case of fire: Use for extinction: CO2, powder or water spray.
- Store in a well-ventilated place. Keep cool.

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

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(Contd. of page 1) · Classification system: · NFPA ratings (scale 0 - 4) Health = 1Fire = 2Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH 1 Health = 12 FIRE Fire = 2**REACTIVITY O** Reactivity = 0· Other hazards · Results of PBT and vPvB assessment • **PBT:** Not applicable. · vPvB: Not applicable. **3** Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 33820-53-0 isopropalin
- · Identification number(s)
- EC number: 251-690-7

4 First-aid measures

- \cdot Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

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6 Accidental release measures

• **Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation. **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.
- · Protective Action Criteria for Chemicals
- · PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

· PAC-3:

Substance is not listed.

7 Handling and storage

- · Handling:
- Precautions for safe handling No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

At this time, the other constituents have no known exposure limits.

• Additional information: The lists that were valid during the creation were used as basis.

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· Flammability (solid, gaseous):

· Decomposition temperature:

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| | (Contd. of page |
|---|---|
| Exposure controls | |
| Personal protective equipment: | |
| General protective and hygienic me | asures: |
| Immediately remove all soiled and co | |
| Wash hands before breaks and at the | end of work. |
| Breathing equipment: | |
| When used as intended with Agilent i | nstruments, the use of the product under normal laboratory conditions and t in significant airborne exposures and therefore respiratory protection is no |
| | a respirator is deemed necessary, use a NIOSH or equivalent approved ganic or acid gas cartridge. |
| Protection of hands: | |
| thickness are recommended for norma | ant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil al use. The breakthrough time is 1 hr. For cleaning a spill where there is ubber gloves are recommended 12-15 mil thickness with breakthrough times dations should be followed. |
| For normal use: nitrile rubber, 11-13 | mil thickness |
| For direct contact with the chemical: I The selection of the suitable gloves do varies from manufacturer to manufact Penetration time of glove material | oes not only depend on the material, but also on further marks of quality and |
| | |
| For normal use: nitrile rubber: 1 hour For direct contact with the chemical: 1 | |
| Eye protection: | Julyi Tubbel. ~4 Hours |
| Tightly sealed goggles Physical and chemical proper Information on basic physical and c | |
| General Information | inemical properties |
| Appearance: | |
| Form: | Fluid |
| Color: | Not determined. |
| Odor: | Characteristic |
| Odor threshold: | Not determined. |
| | |
| pH-value: | Not determined. |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: | Undetermined. Undetermined. |
| 01 0 0 | |
| Flash point: | 40 °C (104 °F) |
| | |

Not applicable.

Not determined.

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| | (Contd. of page 4 |
|----------------------------------|--|
| · Auto igniting: | Not determined. |
| Danger of explosion: | Product is not explosive. However, formation of explosive air/vapor mixtures are possible. |
| Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| Vapor pressure: | Not determined. |
| Density: | Not determined. |
| Relative density | Not determined. |
| Vapor density | Not determined. |
| • Evaporation rate | Not determined. |
| Solubility in / Miscibility with | 1 |
| Water: | Not miscible or difficult to mix. |
| Partition coefficient (n-octan | ol/water): Not determined. |
| Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| VOC content: | 0.00 % |
| | 0.0 g/l / 0.00 lb/gal |
| • Other information | No further relevant information available. |

10 Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 5,000 mg/kg (rat)

Dermal LD50 >2,000 mg/kg (rabbit)

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Oral LD50 5,000 mg/kg (rat)

Dermal LD50 >2,000 mg/kg (rabbit)

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· Primary irritant effect:

• on the skin: No irritant effect.

• on the eye: No irritating effect.

- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

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

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

| · UN-Number | | |
|---------------------------|---|--|
| · DOT, IMDG, IATA | UN1993 | |
| · UN proper shipping name | | |
| · DOT | Flammable liquids, n.o.s. (isopropalin) | |



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|--|--|
| · IMDG, IATA | FLAMMABLE LIQUID, N.O.S. (isopropalin) |
| · Transport hazard class(es) | |
| · DOT, IMDG, IATA | |
| | |
| | |
| | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · Packing group | |
| · DOT, IMDG, IATA | III |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Warning: Flammable liquids |
| · Danger code (Kemler): | 30 |
| · EMS Number: | F-E, <u>S-E</u> |
| · Stowage Category | A |
| • Transport in bulk according to Annex | |
| MARPOL73/78 and the IBC Code | Not applicable. |
| [·] Transport/Additional information: | |
| · DOT | |
| · Quantity limitations | On passenger aircraft/rail: 60 L |
| | On cargo aircraft only: 220 L |
| · IMDG | |
| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Code: E1 |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 1000 ml |
| · UN "Model Regulation": | UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPALIN), 3, |
| | III, ENVIRONMENTALLY HAZARDOUS |

15 Regulatory information

 $^\circ$ Safety, health and environmental regulations/legislation specific for the substance or mixture $^\circ$ 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 not listed.

· TSCA new (21st Century Act): (Substances not listed)

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· Proposition 65

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· 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.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

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

Substance is not listed.

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

16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

- · Department issuing SDS: Document Control / Regulatory
- · Contact: regulatory@ultrasci.com
- · Date of preparation / last revision 03/24/2019 / 2
- · 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

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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit Flam. Liq. 3: Flammable liquids - Category 3

• * Data compared to the previous version altered.



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