

Printing date 03/24/2019 Version Number 2 Reviewed on 03/24/2019

1 Identification

· Product identifier

· Trade name: 1,5-Dichloronaphthalene

· Part number: RCN-006

• CAS Number: 1825-30-5 • EC number: 217-364-3

- · 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

 $\cdot \ \, \textbf{Information department:}$

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



GHS06 Skull and crossbones

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

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







GHS05

GHS06

GHS07

· Signal word Danger

(Contd. on page 2)



Printing date 03/24/2019 Version Number 2 Reviewed on 03/24/2019

Trade name: 1,5-Dichloronaphthalene

(Contd. of page 1)

· Hazard-determining components of labeling:

1,5-dichloronaphthalene

· Hazard statements

Harmful if swallowed.

Toxic in contact with skin or if inhaled.

Causes skin irritation.

Causes serious eye damage.

May cause respiratory irritation.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

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

If swallowed: Call a poison center/doctor if you feel unwell.

If on skin: Wash with plenty of water.

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

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/doctor.

Specific treatment (see on this label).

Rinse mouth.

Take off immediately all contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 4Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



*3 Health = *3 • Fire = 0

REACTIVITY 0 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

1825-30-5 1,5-dichloronaphthalene

(Contd. on page 3)



Printing date 03/24/2019 Version Number 2 Reviewed on 03/24/2019

Trade name: 1,5-Dichloronaphthalene

(Contd. of page 2)

· Identification number(s)

• EC number: 217-364-3

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

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

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Immediately call a 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: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

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:

Use neutralizing agent.

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.

(Contd. on page 4)



Printing date 03/24/2019 Version Number 2 Reviewed on 03/24/2019

Trade name: 1,5-Dichloronaphthalene

(Contd. of page 3)

· PAC-2:

Substance is not listed.

· PAC-3:

Substance is not listed.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

- Information about protection against explosions and fires: Keep respiratory protective device available.
- · 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.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· Breathing equipment:

When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.

Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.

(Contd. on page 5)



Printing date 03/24/2019 Version Number 2 Reviewed on 03/24/2019

Trade name: 1,5-Dichloronaphthalene

(Contd. of page 4)

· Protection of hands:

Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

· Material of gloves

For normal use: nitrile rubber, 11-13 mil thickness

For direct contact with the chemical: butyl rubber, 12-15 mil thickness

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

For normal use: nitrile rubber: 1 hour

For direct contact with the chemical: butyl rubber: >4 hours

· Eye protection:



Tightly sealed goggles

0 Physic	ical and	dehor	nical	proper	tine
J I HYS	icai aii	u chei	IIICal	proper	TEN

· Int	ormation	on basic	physical	l and	chemical	properties
\sim		. •				

· General Information

· Appearance:

Form: Solid Color: Not d

Color: Not determined.

Odor: Characteristic

Odor threshold: Not determined.

• **pH-value:** Not applicable.

· Change in condition

Melting point/Melting range: 107 °C (224.6 °F) **Boiling point/Boiling range:** Undetermined.

• Flash point: Not applicable.

· Flammability (solid, gaseous): Product is not flammable.

· **Decomposition temperature:** Not determined.

· Auto igniting: Not determined.

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

· Explosion limits:

Lower: Not determined. Upper: Not determined.

· Vapor pressure: Not applicable.

Density: Not determined.

• Relative density Not determined.

• Vapor density Not applicable.

(Contd. on page 6)



Printing date 03/24/2019 Version Number 2 Reviewed on 03/24/2019

Trade name: 1,5-Dichloronaphthalene

(Contd. of page 5)

• Evaporation rate Not applicable.

· Solubility in / Miscibility with

Water at 25 °C (77 °F): 0.0004 g/l

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

· Viscosity:

Dynamic: Not applicable.

Kinematic: Not applicable.

VOC content: 0.00 %

• 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.

0.0 g/l / 0.00 lb/gal

- · 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	500 mg/kg
Dermal	LD50	300 mg/kg
Inhalative	LC50/4 h	0.5 mg/L

- · Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Strong irritant with the danger of severe eye injury.
- · 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.



Printing date 03/24/2019 Version Number 2 Reviewed on 03/24/2019

Trade name: 1,5-Dichloronaphthalene

(Contd. of page 6)

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 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- · 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.

14 Transport	m	tormat	tion
--------------	---	--------	------

· UN-Number · DOT, IMDG, IATA	UN2811
· UN proper shipping name · DOT · IMDG, IATA	Toxic solids, organic, n.o.s. (1,5-dichloronaphthalene) TOXIC SOLID, ORGANIC, N.O.S. (1,5-dichloronaphthalene)

- · Transport hazard class(es)
- · DOT



· Class	6.1 Toxic substances
· Label	6.1

· IMDG, IATA

· Class not regulated

· Packing group

· DOT, IMDG, IATA not regulated

(Contd. on page 8)



Printing date 03/24/2019 Version Number 2 Reviewed on 03/24/2019

Trade name: 1,5-Dichloronaphthalene

(Contd. of page 7)

	(18
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Toxic substances
Danger code (Kemler):	60
EMS Number:	F-A,S-A
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
UN "Model Regulation":	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (1,5- DICHLORONAPHTHALENE), 6.1, III, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

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

1825-30-5 1,5-dichloronaphthalene

- · Proposition 65
- · 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.



Printing date 03/24/2019 Version Number 2 Reviewed on 03/24/2019

Trade name: 1,5-Dichloronaphthalene

(Contd. of page 8)

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
- \cdot Date of preparation / last revision 03/24/2019 / 1
- · 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

Acute Tox. 4: Acute toxicity - Category 4

Acute Tox. 3: Acute toxicity - Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.

US ·