# SAFETY DATA SHEET

Version 5.1 Revision Date 06/27/2014 Print Date 11/04/2018

### 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Dodin

Product Number : 45466

Brand : Sigma-Aldrich Index-No. : 607-076-00-X

CAS-No. : 2439-10-3

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

**USA** 

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 2), H330

Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

Sigma-Aldrich - 45466 Page 1 of 8

P270 Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. P271 P273 Avoid release to the environment. Wear protective gloves/ eye protection/ face protection. P280 Wear respiratory protection. P284 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you P301 + P312 feel unwell. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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. P310 Immediately call a POISON CENTER or doctor/ physician. P320 Specific treatment is urgent (see supplemental first aid instructions on this label). P330 Rinse mouth. P332 + P313 If skin irritation occurs: Get medical advice/ attention. P337 + P313 If eve irritation persists: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse.

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

Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

Collect spillage.

Store locked up.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

P391

P405

P501

P403 + P233

**Hazardous components** 

Component	Classification	Concentration
Dodine		
	Acute Tox. 4; Acute Tox. 2; Skin Irrit. 2; Eye Irrit. 2A; Aquatic Acute 1; Aquatic Chronic 1; H302, H315, H319, H330, H410	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

## 4.1 Description of first aid measures

## General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

## In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Sigma-Aldrich - 45466 Page 2 of 8

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

## 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx)

Carbon oxides, nitrogen oxides (NOx)

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

no data available

### 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

# 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

## Components with workplace control parameters

Contains no substances with occupational exposure limit values.

# 8.2 Exposure controls

### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Sigma-Aldrich - 45466 Page 3 of 8

## Personal protective equipment

### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Viscosity

s) Explosive properties

#### 9.1 ties

Information on basic physical and chemical propertie			
a)	Appearance	Form: solid Colour: colourless	
b)	Odour	no data available	
c)	Odour Threshold	no data available	
d)	pH	no data available	
e)	Melting point/freezing point	no data available	
f)	Initial boiling point and boiling range	no data available	
g)	Flash point	> 100.00 °C (> 212.00 °F)	
h)	Evapouration rate	no data available	
i)	Flammability (solid, gas)	no data available	
j)	Upper/lower flammability or explosive limits	no data available	
k)	Vapour pressure	no data available	
l)	Vapour density	no data available	
m)	Relative density	no data available	
n)	Water solubility	insoluble	
o)	Partition coefficient: n-octanol/water	no data available	
p)	Auto-ignition temperature	no data available	
q)	Decomposition temperature	no data available	

Sigma-Aldrich - 45466 Page 4 of 8

no data available

no data available

t) Oxidizing properties

no data available

# 9.2 Other safety information

no data available

#### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

no data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

no data available

#### 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

### 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - rat - 660 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Diarrhoea Gastrointestinal:Other changes.

LC50 Inhalation - mouse - 2 h - 129 mg/m3

LD50 Dermal - rabbit - 2,100 mg/kg

Remarks: Gastrointestinal:Ulceration or bleeding from stomach. Blood: Hemorrhage. Prolonged skin contact may cause skin irritation and/or dermatitis.

no data available

## Skin corrosion/irritation

## Serious eye damage/eye irritation

Eyes - rabbit

Result: Moderate eye irritation

### Respiratory or skin sensitisation

no data available

## Germ cell mutagenicity

no data available

# Carcinogenicity

Carcinogenicity - mouse - Subcutaneous

Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration:Tumors. Blood:Tumors.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

Sigma-Aldrich - 45466 Page 5 of 8

### Reproductive toxicity

no data available

no data available

## Specific target organ toxicity - single exposure

no data available

## Specific target organ toxicity - repeated exposure

no data available

## **Aspiration hazard**

no data available

#### **Additional Information**

RTECS: MF1750000

Vomiting, Diarrhoea, Abdominal pain, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 0.6 - 0.9 mg/l - 96.0 h

Toxicity to daphnia and

other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 0.02 mg/l - 48 h

# 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

# 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

no data available

## 13. DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## Contaminated packaging

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

## DOT (US)

Not dangerous goods

### **IMDG**

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dodine)

Marine pollutant: Marine pollutant

Sigma-Aldrich - 45466 Page 6 of 8

**IATA** 

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Dodine)

### **Further information**

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

#### 15. REGULATORY INFORMATION

# **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Acute Health Hazard

## **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

Dodine CAS-No. Revision Date 2439-10-3 2007-07-01

**New Jersey Right To Know Components** 

Dodine CAS-No. Revision Date 2439-10-3 2007-07-01

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### 16. OTHER INFORMATION

# Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity

Eye Irrit. Eye irritation

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

**HMIS Rating** 

Health hazard: 2
Chronic Health Hazard:
Flammability: 1
Physical Hazard 0

**NFPA Rating** 

Health hazard: 2
Fire Hazard: 1
Reactivity Hazard: 0

Sigma-Aldrich - 45466 Page 7 of 8

#### **Further information**

Copyright 2014 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

## **Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.1 Revision Date: 06/27/2014 Print Date: 11/04/2018

Sigma-Aldrich - 45466 Page 8 of 8