

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 30.05.2023

Version number 1.0

Revision: 30.05.2023

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

- **1.1 Product identifier**
- **Trade name:** RNAstabilizer,Irrevesible RNase Inactivation Reagent **50 Tests**
- **Article number:** 180-01891
- **Registration number**
Registration numbers of the individual components: see section 3.2, if applicable.
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:** Laboratory chemicals
- **Uses advised against**
Only for professional use.
Do not use for private purposes (household).
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
FUJIFILM Wako Chemicals Europe GmbH
Fuggerstr. 12
41468 Neuss
Deutschland
Tel: +49 (0) 2131-311-0
Fax: +49 (0) 2131-311 100
- **Further information obtainable from:** msds_eu@fujifilm.com
- **1.4 Emergency telephone number:** +49 (0) 2131-311-0 (8h-16h)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 3 H331 Toxic if inhaled.
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 1 H370 Causes damage to organs.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS06 GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**
methanol
2-iodoacetamide

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Hazard statements

- H225 Highly flammable liquid and vapour.
- H302 Harmful if swallowed.
- H331 Toxic if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 May cause an allergic skin reaction.
- H370 Causes damage to organs.

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.

2.3 Other hazards
Results of PBT and vPvB assessment

- PBT:** Not applicable.
- vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

- Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

| | | |
|------------------------------------|--|--------|
| CAS: 67-56-1 EINECS: 200-659-6 | methanol ⚠ Flam. Liq. 2, H225; ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ STOT SE 1, H370 Specific concentration limits: STOT SE 1; H370: C ≥ 10 % STOT SE 2; H371: 3 % ≤ C < 10 % | 70-90% |
| CAS: 144-48-9 EINECS: 205-630-1 | 2-iodoacetamide ⚠ Acute Tox. 3, H301; ⚠ Resp. Sens. 1, H334; ⚠ Skin Sens. 1, H317; Aquatic Chronic 4, H413 | 10-20% |

- SVHC** Does not contain a SVHC according to REACH, Article 57 >0,1%
- Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 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 equipment 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.

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If skin irritation continues, consult a doctor.

- **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

- **4.2 Most important symptoms and effects, both acute and delayed** Allergic reactions

- **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **For safety reasons unsuitable extinguishing agents:** None.

- **5.2 Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

- **5.3 Advice for firefighters**

- **Protective equipment:**

Mouth respiratory protective device.

Wear fully protective suit.

- **Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Remove persons from danger area.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- **6.2 Environmental precautions:**

Dilute with plenty of water.

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

- **6.3 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.

- **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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

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- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Store in cool, dry conditions in well sealed receptacles.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidising agents.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
-20°C
- **Storage class:** 3
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

67-56-1 methanol

| | |
|-----------|--|
| OEL | Long-term value: 260 mg/m ³ , 200 ppm |
| Sk, IOELV | |

- **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
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 eyes and skin.
Do not eat, drink, smoke or sniff while working.
Storing food in the working area is prohibited.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Hand protection**



Protective gloves

· Material of gloves

Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness ≥ 0.36 mm, breakthrough time > 480 min), nitrile rubber (thickness ≥ 0.38 mm, breakthrough time > 480 min) or neoprene (thickness ≥ 0.65

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mm, breakthrough time > 240 min).

- **Eye/face protection**



Safety glasses

The protective safety glasses to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN166.

- **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

| | |
|---|--------------------------------------|
| • Physical state | Fluid |
| • Colour: | Colourless |
| • Odour: | Characteristic |
| • Odour threshold: | Not determined. |
| • Melting point/freezing point: | -98 °C |
| • Boiling point or initial boiling point and boiling range | 65 °C |
| • Flammability | Highly flammable. Not applicable. |
| • Lower and upper explosion limit | |
| • Lower: | 6 Vol % |
| • Upper: | 36.5 Vol % |
| • Flash point: | 12.6 °C |
| • Ignition temperature: | 464 °C |
| • Decomposition temperature: | Not determined. |
| • pH | Not determined. |
| • Viscosity: | |
| • Kinematic viscosity | Not determined. |
| • Dynamic: | Not determined. |
| • Solubility | |
| • water: | Fully miscible. |
| • Partition coefficient n-octanol/water (log value) | Not determined. |
| • Vapour pressure: | Not determined. |
| • Density and/or relative density | |
| • Density: | Not determined. |
| • Relative density | Not determined. |
| • Vapour density at 20 °C | 1.1 g/cm ³ |

- **9.2 Other information**

| | |
|-------------------------------------|------------------------------|
| • Appearance: | |
| • Form: | Liquid |
| • Auto-ignition temperature: | Product is not selfigniting. |
| • Explosive properties: | Not determined. |

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| | |
|--|-------------------------------------|
| · Evaporation rate | Not determined. |
| · Information with regard to physical hazard classes | |
| · Explosives | Not applicable |
| · Flammable gases | Not applicable |
| · Aerosols | Not applicable |
| · Oxidising gases | Not applicable |
| · Gases under pressure | Not applicable |
| · Flammable liquids | Highly flammable liquid and vapour. |
| · Flammable solids | Not applicable |
| · Self-reactive substances and mixtures | Not applicable |
| · Pyrophoric liquids | Not applicable |
| · Pyrophoric solids | Not applicable |
| · Self-heating substances and mixtures | Not applicable |
| · Substances and mixtures, which emit flammable gases in contact with water | Not applicable |
| · Oxidising liquids | Not applicable |
| · Oxidising solids | Not applicable |
| · Organic peroxides | Not applicable |
| · Corrosive to metals | Not applicable |
| · Desensitised explosives | Not applicable |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Flammable.
- **10.4 Conditions to avoid**
See "Fire Fighting measures".
Protect from heat and direct sunlight.
- **10.5 Incompatible materials:** Oxidising agents.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**
Harmful if swallowed.
Toxic if inhaled.

· **LD/LC50 values relevant for classification:**

67-56-1 methanol

| | | |
|------------|---------|-----------------------|
| Oral | LD50 | 1,400 mg/kg (Human) |
| Dermal | LD50 | 15,800 mg/kg (rabbit) |
| Inhalative | LC50/8h | 22,500 ppm (rat) |

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144-48-9 2-iodoacetamide

| | | |
|------|------|------------------|
| Oral | LD50 | 74 mg/kg (mouse) |
|------|------|------------------|

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
Causes damage to organs.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

67-56-1 methanol

| | |
|-----------|------------------------|
| EC50/96h | 1,000 mg/l (Algae) |
| | 5,463 mg/l (daphnia) |
| LC50/96 h | 1,340 mg/l (crustacea) |
| | 15,400 mg/l (fish) |

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

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SECTION 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.

Contact waste processors for recycling information.

European waste catalogue

| | |
|------|---|
| HP3 | Flammable |
| HP5 | Specific Target Organ Toxicity (STOT)/Aspiration Toxicity |
| HP6 | Acute Toxicity |
| HP13 | Sensitising |

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN number or ID number

ADR, IMDG, IATA

UN1230

14.2 UN proper shipping name

ADR

1230 METHANOL

IMDG, IATA

METHANOL

14.3 Transport hazard class(es)

ADR



Class

3 Flammable liquids.

Label

3+6.1

IMDG



Class

3 Flammable liquids.

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| | |
|---|---|
| · Label | 3/6.1 |
| · IATA | |
|  |  |
| · Class | 3 Flammable liquids. |
| · Label | 3 (6.1) |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | II |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Warning: Flammable liquids. |
| · Hazard identification number (Kemler code): | 336 |
| · EMS Number: | F-E,S-D |
| · Stowage Category | B |
| · Stowage Code | SW2 Clear of living quarters. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · Transport/Additional information: | |
| · ADR | |
| · Limited quantities (LQ) | 1L |
| · Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |
| · Transport category | 2 |
| · Tunnel restriction code | D/E |
| · IMDG | |
| · Limited quantities (LQ) | 1L |
| · Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |
| · UN "Model Regulation": | UN 1230 METHANOL, 3 (6.1), II |

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category
H2 ACUTE TOXIC
P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t

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- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 69

| |
|---|
| · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II |
|---|

| |
|------------------------------------|
| None of the ingredients is listed. |
|------------------------------------|

- **REGULATION (EU) 2019/1148**

| |
|---|
| · Regulation (EC) No 273/2004 on drug precursors |
|---|

| |
|------------------------------------|
| None of the ingredients is listed. |
|------------------------------------|

| |
|---|
| · Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors |
|---|

| |
|------------------------------------|
| None of the ingredients is listed. |
|------------------------------------|

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

SECTION 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. This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

- **Relevant phrases**

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H317 May cause an allergic skin reaction.

H331 Toxic if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H370 Causes damage to organs.

H413 May cause long lasting harmful effects to aquatic life.

- **Classification according to Regulation (EC) No 1272/2008**

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

- **Creation Date** 28.01.2020

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4