# Thermofisher SCIENTIFIC

# SAFETY DATA SHEET

Revision Date 18-May-2015

**Revision Number 1** 

# 1. Identification

**Product Name** 

RapiD ONE System

Cat No.:

R8311006

Synonyms

No information available

**Recommended Use** 

Laboratory chemicals.

Uses advised against

No Information available

Details of the supplier of the safety data sheet

Company

Remel

12076 Santa Fe Drive

Lenexa, KS 66215 United States Telephone: 1-800-255-6730

Fax:1-800-621-8251

Emergency Telephone Number INFOTRAC - 24 Hour Number: 1-800-535-5053

Outside of the United States, call 24 Hour Number: 001-352-323-3500 (Call Collect)

# 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/irritation

Category 2

Serious Eye Damage/Eye Irritation

Category 2

Reproductive Toxicity

Category 1B

Specific target organ toxicity (single exposure)

Category 3

Target Organs - Respiratory system, Central nervous system (CNS).

Category 2

Specific target organ toxicity - (repeated exposure)

Target Organs - Kidney, Blood.

#### Label Elements

## Signal Word

Danger

# **Hazard Statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

May cause drowsiness or dizziness

May damage fertility. May damage the unborn child

May cause damage to organs through prolonged or repeated exposure



### **Precautionary Statements**

#### Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Wear eye/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

Storage

Store locked up

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

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

# 3. Composition / information on ingredients

Component	CAS-No	Weight %
Acetic acid	64-19-7	1.67
Hydrochloric acid	7647-01-0	0.08
2-Methoxyethanol	109-86-4	8.33

#### 4. First-aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes.

Inhalation

Move to fresh air.

Ingestion

Do not induce vomiting.

Most important symptoms/effects

Notes to Physician

No information available.

Treat symptomatically

5. Fire-fighting measures

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

**Autoignition Temperature** 

No information available

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

#### Hazardous Combustion Products

None known

**Protective Equipment and Precautions for Firefighters** 

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health Flammability 2 0

Instability 0 Physical hazards

N/A

# 6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions See Section 12 for additional ecological information.

Methods for Containment and Clean Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, Up sawdust). Provide adequate ventilation.

# 7. Handling and storage

Handling

Ensure adequate ventilation.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

# 8. Exposure controls / personal protection

## Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetic acid	TWA: 10 ppm STEL: 15 ppm	(Vacated) TWA: 10 ppm (Vacated) TWA: 25 mg/m³ TWA: 10 ppm TWA: 25 mg/m³	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³
Hydrochloric acid	Ceiling: 2 ppm	Ceiling: 5 ppm Ceiling: 7 mg/m³ (Vacated) Ceiling: 5 ppm (Vacated) Ceiling: 7 mg/m³	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m³
2-Methoxyethanol	TWA: 0.1 ppm Skin	(Vacated) TWA: 25 ppm (Vacated) TWA: 80 mg/m³ Skin TWA: 25 ppm TWA: 80 mg/m³	IDLH: 200 ppm TWA: 0.1 ppm TWA: 0.3 mg/m³

Component Mexico OEL (TWA) Ontario TWAEV

	Quebec			
Acetic acid	TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³	TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³	TWA: 10 ppm STEL: 15 ppm	
Hydrochloric acid	Ceiling: 5 ppm Ceiling: 7.5 mg/m³	Ceiling: 5 ppm Ceiling: 7 mg/m³	CEV: 2 ppm	
2-Methoxyethanol	TWA: 5 ppm TWA: 16 mg/m³ Skin	TWA: 25 ppm TWA: 80 mg/m³ STEL: 35 ppm STEL: 120 mg/m³	TWA: 0.1 ppm Skin	

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures** 

Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment** 

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Wear appropriate protective gloves and clothing to prevent skin exposure. Skin and body protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard Respiratory Protection

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if

exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

**Physical State** Liquid **Appearance** No information available Odor No information available **Odor Threshold** No information available рΗ No information available Melting Point/Range No data available **Boiling Point/Range** No information available Flash Point No information available **Evaporation Rate** No information available Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper No data available Lower No data available

Vapor Pressure No information available Vapor Density No information available Specific Gravity No information available Solubility No information available No data available

Partition coefficient; n-octanol/water

**Autoignition Temperature** No information available **Decomposition Temperature** No information available **Viscosity** No information available

VOC Content(%)

# 10. Stability and reactivity

Reactive Hazard

None known, based on information available

Stability

Stable under normal conditions.

**Conditions to Avoid** 

Incompatible products.

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products None under normal use conditions

**Hazardous Polymerization** 

Hazardous polymerization does not occur.

**Hazardous Reactions** 

None under normal processing.

# 11. Toxicological information

## **Acute Toxicity**

**Product Information** 

Oral LD50 Dermai LD50 Vapor LC50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetic acid	3310 mg/kg ( Rat )	1060 mg/kg (Rabbit)	11.4 mg/L (Rat)4 h
Hydrochloric acid	LD50 238 - 277 mg/kg (Rat)	LD50 > 5010 mg/kg (Rabbit)	LC50 = 1.68 mg/L (Rat) 1 h
2-Methoxyethanol	LD50 = 2370 mg/kg (Rat)	LD50 = 1280 mg/kg (Rabbit)	LC50 = 1478 ppm (Rat)7 h

**Toxicologically Synergistic** 

**Products** 

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation

No information available

Sensitization

No information available

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

1	Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
I	Acetic acid	64-19-7	Not listed				
1	Hydrochloric acid	7647-01-0	Not listed				
I	2-Methoxyethanol	109-86-4	Not listed	Not listed	Not fisted	Not listed	Not listed

**Mutagenic Effects** 

No information available

Reproductive Effects

No information available.

**Developmental Effects** 

No information available.

Teratogenicity

No information available.

STOT - single exposure

Respiratory system Central nervous system (CNS)

STOT - repeated exposure

Kidney Blood

Aspiration hazard

No information available

Symptoms / effects, both acute and No information available

delayed

**Endocrine Disruptor Information** 

No information available

Other Adverse Effects

The toxicological properties have not been fully investigated.

# 12. Ecological information

Ecotoxicity

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Acetic acid	<u>-</u>	Pimephales promelas: LC50 = 88 mg/L/96h Lepomis macrochirus: LC50 = 75 mg/L/96h	phosphoreum: EC50 = 8.8	EC50 = 95 mg/L/24h
Hydrochloric acid	-	282 mg/L LC50 96 h	-	
2-Methoxyethanol	Not listed	LC50: > 500 mg/L, 96h static (Leuciscus idus) LC50: = 16000 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 9650 mg/L, 96h static (Lepomis macrochirus) LC50: = 10000 mg/L, 96h static (Lepomis macrochirus)	Not listed	EC50: > 10000 mg/L, 24l (Daphnia magna)

Persistence and Degradability Bioaccumulation/ Accumulation

No information available No information available.

## Mobility

Component	log Pow
Acetic acid	-0.2
2-Methoxyethanol	-0.85

# 13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

DOT		rt information	
	Not regulated		
<u>TDG</u>	Not regulated		
ATA_	Not regulated		
MDG/IMO	Not regulated		

All of the components in the product are on the following inventory lists: X = listed

### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Acetic acid	Х	X	-	200-580-7	-	· · · · · · · · · · · · · · · · · · ·	Х	X	X	X	X
Hydrochloric acid	Х	Х	-	231-595-7	-		X	X	X	X	X
2-Methoxyethanol	Х	Х	-	203-713-7	-		X	X	X	X	$\frac{\lambda}{x}$

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

## U.S. Federal Regulations

#### **TSCA 12(b)**

Component	TSCA 12(b)
2-Methoxyethanol	Section 5

**SARA 313** 

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Hydrochloric acid	7647-01-0	0.08	1.0
2-Methoxyethanol	109-86-4	8.33	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### Clean Water Act

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Acetic acid	Х	5000 lb		-
Hydrochloric acid	X	5000 lb	-	-

### Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Hydrochloric acid	Х		-
2-Methoxyethanol	X		-

## **OSHA** Occupational Safety and Health Administration

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Hydrochloric acid	-	TQ: 5000 lb

#### **CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs
Acetic acid	5000 lb	-
Hydrochloric acid	5000 lb	5000 lb

## California Proposition 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
2-Methoxyethanol	109-86-4	Developmental	-	Developmental
		Male Reproductive		

# U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acetic acid	Х	X	X	-	Х

Hydrochloric acid	X	X	X	X	
2-Methoxyethanol	Х	X	X	X	X

# U.S. Department of Transportation

Reportable Quantity (RQ):

Ν

**DOT Marine Pollutant** 

Ν

DOT Severe Marine Pollutant

# U.S. Department of Homeland Security

This product contains the following DHS chemicals:

Component	DHS Chemical Facility Anti-Terrorism Standard
Hydrochloric acid	0 lb STQ (anhydrous); 11250 lb STQ (37% concentration or
Other International Regulations	greater)

Other International Regulations

Mexico - Grade

No information available

#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

D2A Very toxic materials



# 16. Other information

Prepared By

Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

**Revision Date** 

18-May-2015

**Print Date** 

18-May-2015

**Revision Summary** 

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

#### Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS