



Part of Thermo Fisher Scientific

Material Safety Data Sheet

Creation Date 12-May-2009

Revision Date 12-Feb-2013

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name PYR REAGENT 25ml

Cat No. R21258

Synonyms No information available.

Recommended Use Laboratory chemicals

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. HAZARDS IDENTIFICATION

WARNING!

Emergency Overview

May impair fertility. May cause harm to the unborn child. Substances known to cause developmental toxicity in humans.
May cause skin, eye, and respiratory tract irritation.

Appearance No information available **Physical State** Liquid **Odor** No information available

Target Organs Blood, Reproductive System, Kidney, Liver, spleen

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes May cause irritation.
Skin May cause irritation. May be harmful in contact with skin.
Inhalation May cause irritation of respiratory tract. May be harmful if inhaled.
Ingestion May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects May impair fertility. May cause harm to the unborn child. May cause adverse kidney effects.
May cause adverse liver effects.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Central nervous system disorders. Preexisting eye disorders. Blood disorders. Kidney disorders. Overexposure may cause female and male reproductive disorder(s). Skin disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
2-Methoxyethanol	109-86-4	5

Acetic acid	64-19-7	2.5
Sodium lauryl sulfate	151-21-3	2.5
Formamide	75-12-7	2

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	Not applicable
Method -	No information available.
Autoignition Temperature	No information available.
Explosion Limits	
Upper	No data available
Lower	No data available
Suitable Extinguishing Media	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire..
Unsuitable Extinguishing Media	No information available.
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact	No information available.
Sensitivity to static discharge	No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

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** 1 **Flammability** 0 **Instability** 0 **Physical hazards** N/A

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.
Environmental Precautions	Should not be released into the environment.
Methods for Containment and Clean Up	Soak up with inert absorbent material. Keep in suitable, closed containers for disposal..

7. HANDLING AND STORAGE

Handling Use only under a chemical fume hood. Wear personal protective equipment. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-Methoxyethanol	TWA: 0.1 ppm Skin	(Vacated) TWA: 25 ppm (Vacated) TWA: 80 mg/m ³ Skin TWA: 25 ppm TWA: 80 mg/m ³	IDLH: 200 ppm TWA: 0.1 ppm TWA: 0.3 mg/m ³
Acetic acid	TWA: 10 ppm STEL: 15 ppm	(Vacated) TWA: 10 ppm (Vacated) TWA: 25 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³
Formamide	TWA: 10 ppm Skin	(Vacated) TWA: 20 ppm (Vacated) TWA: 30 mg/m ³ (Vacated) STEL: 30 ppm (Vacated) STEL: 45 mg/m ³	TWA: 10 ppm TWA: 15 mg/m ³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
2-Methoxyethanol	TWA: 5 ppm TWA: 16 mg/m ³ Skin	TWA: 25 ppm TWA: 80 mg/m ³ STEL: 35 ppm STEL: 120 mg/m ³	TWA: 0.1 ppm Skin
Acetic acid	TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³	TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³	TWA: 10 ppm STEL: 15 ppm
Formamide	TWA: 10 ppm TWA: 18 mg/m ³ Skin	TWA: 20 ppm TWA: 30 mg/m ³ STEL: 30 ppm STEL: 45 mg/m ³	TWA: 10 ppm Skin

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eyeface 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

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

Appearance

No information available

Odor

No information available

Odor Threshold

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

pH	No information available.
Vapor Pressure	No information available.
Vapor Density	No information available.
Viscosity	No information available.
Boiling Point/Range	Not applicable
Melting Point/Range	No data available
Decomposition temperature	No information available.
Flash Point	Not applicable
Evaporation Rate	No information available.
Specific Gravity	No information available.
Solubility	No information available.
log Pow	No data available

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	Excess heat. Incompatible products.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	Hazardous polymerization does not occur
Hazardous Reactions .	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information	No acute toxicity information is available for this product
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Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-Methoxyethanol	2370 mg/kg (Rat)	1280 mg/kg (Rabbit) 2000 mg/kg (Rat)	Not listed
Acetic acid	3310 mg/kg (Rat)	1060 mg/kg (Rabbit)	11.4 mg/L (Rat) 4 h
Sodium lauryl sulfate	1288 mg/kg (Rat)	580 mg/kg (Rabbit)	3900 mg/m ³ (Rat) 1 h
Formamide	5000 mg/kg (Rat)	Not listed	3900 ppm (Rat) 6 h

Irritation	No information available.
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Toxicologically Synergistic Products	No information available.
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Chronic Toxicity

Carcinogenicity	There are no known carcinogenic chemicals in this product
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Sensitization	No information available.
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Mutagenic Effects	Mutagenic effects have occurred in humans.
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Reproductive Effects	Experiments have shown reproductive toxicity effects on laboratory animals.
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Developmental Effects	Developmental effects have occurred in experimental animals.
Teratogenicity	Teratogenic effects have occurred in experimental animals..
Other Adverse Effects	The toxicological properties have not been fully investigated.. See actual entry in RTECS for complete information.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
2-Methoxyethanol	Not listed	500 mg/L LC50 96 h 10000 mg/L LC50 96 h 16000 mg/L LC50 96 h 9650 mg/L LC50 96 h	Not listed	10000 mg/L EC50 > 24 h
Acetic acid	Not listed	Pimephales promelas: LC50 = 88 mg/L/96h Lepomis macrochirus: LC50 = 75 mg/L/96h	Photobacterium phosphoreum: EC50 = 8.8 mg/L/15 min Photobacterium phosphoreum: EC50 = 8.8 mg/L/25 min Photobacterium phosphoreum: EC50 = 8.8 mg/L/5 min	EC50 = 95 mg/L/24h
Sodium lauryl sulfate	3.59 - 15.6 mg/L EC50 96 h 53 mg/L EC50 = 72 h 30 - 100 mg/L EC50 96 h 117 mg/L EC50 = 96 h	1.31 mg/L LC50 96 h 9.9-20.1 mg/L LC50 96 h 4.5 mg/L LC50 96 h 4.62 mg/L LC50 96 h 7.97 mg/L LC50 96 h 10.2-22.5 mg/L LC50 96 h 10.8-16.6 mg/L LC50 96 h 13.5-18.3 mg/L LC50 96 h 15-18.9 mg/L LC50 96 h 22.1-22.8 mg/L LC50 96 h 4.06-5.75 mg/L LC50 96 h 4.2-4.8 mg/L LC50 96 h 4.3-8.5 mg/L LC50 96 h 5.8-7.5 mg/L LC50 96 h 6.2-9.6 mg/L LC50 96 h 8-12.5 mg/L LC50 96 h 4.2 mg/L LC50 96 h	= 0.46 mg/L EC50 Photobacterium phosphoreum 30 min = 0.72 mg/L EC50 Photobacterium phosphoreum 15 min = 1.19 mg/L EC50 Photobacterium phosphoreum 5 min	1.8 mg/L EC50 = 48 h
Formamide	500 mg/L EC50 > 72 h 500 mg/L EC50 > 96 h	9135 mg/L LC50 96 h 4600-9300 mg/L LC50 96 h	EC50 > 10000 mg/L 17 h	500 mg/L EC50 > 48 h

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available

Mobility

Component	log Pow
2-Methoxyethanol	-0.85
Acetic acid	-0.2
Sodium lauryl sulfate	1.6
Formamide	-0.82

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.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
2-Methoxyethanol	S	X	-	203-713-7	-		X	X	X	X	X
Acetic acid	X	X	-	200-580-7	-		X	X	X	X	X
Sodium lauryl sulfate	X	X	-	205-788-1	-		X	X	X	X	X
Formamide	X	X	-	200-842-0	-		X	X	X	X	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 %
2-Methoxyethanol	109-86-4	5	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
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	X	5000 lb	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depleters	Class 2 Ozone Depleters
2-Methoxyethanol	X		-

OSHA

Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

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

California Proposition 65

This product contains the following Proposition 65 chemicals:

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

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
2-Methoxyethanol	X	X	X	X	X
Acetic acid	X	X	X	-	X
Formamide	X	X	X	-	X

U.S. Department of Transportation

Reportable Quantity (RQ):	Y
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade

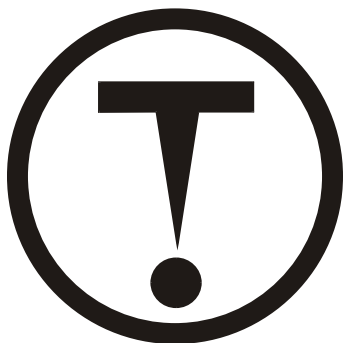
No information available

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
Remel
Tel: 1-800-255-6730

Creation Date

12-May-2009

Print Date

12-Feb-2013

Revision Summary

"***", and red text indicates revision

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 MSDS