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SAFETY DATA SHEET

Revision Date 10-Dec-2014

Revision Number 1

1. Identification

Product Name

Spot Indole Reagent

Cat No.:

R21550

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

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

Corrosive to metals

Skin-Corresion/imitation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity (single exposure)

Target Organs - Respiratory system.

Category 1

Category=1=D

Category 1

Category 3

Label Elements

Signal Word

Danger

Hazard Statements

May be corrosive to metals

Causes severe skin burns and eye damage

May cause respiratory irritation



Precautionary Statements

Prevention

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

Wash face, hands and any exposed skin thoroughly after handling

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

Use only outdoors or in a well-ventilated area

Keep only in original container

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

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

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Eyes

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

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Spills

Absorb spillage to prevent material damage

Storage

Store locked up

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

Store in corrosive resistant polypropylene container with a resistant inliner

Store in a dry place

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

Unknown Acute Toxicity

.?-percent of the mixture consists of ingredient(s) of unknown acute toxicity

3 Composition/information on ingradients

Component	CAS-No	Weight %
Hydrochloric acid	7647-01-0	9.9
2-Propenal, 3-[4-(dimethylamino)phenyl]-	6203-18-5	0.99

4. First-aid measures

General Advice

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Call a physician immediately.

If breathing is difficult, give oxygen. Remove from exposure, lie down. Do not use Inhalation

mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory

medical device. Call a physician immediately.

Do not induce vomiting. Never give anything by mouth to an unconscious person. Clean Ingestion

mouth with water. Call a physician immediately.

Causes burns by all exposure routes. . Ingestion causes severe swelling, severe damage Most important symptoms/effects

to the delicate tissue and danger of perforation: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus

should be investigated Treat symptomatically

Notes to Physician

5. Fire-fighting measures

CO₂, dry chemical, dry sand, alcohol-resistant foam. Suitable Extinguishing Media

No information available Unsuitable Extinguishing Media

Flash Point Method -

Not applicable

No information available

Autoignition Temperature

No information available

Explosion Limits Upper

No data available No data available

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

No information available

Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

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

NFPA_

Health

Flammability 0

Instability

Physical hazards

N/A

Accidental release measures

Personal Precautions

Use personal protective equipment. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak. Ensure adequate ventilation.

Refer to protective measures listed in Sections 7 and 8 **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional ecological

information.

Methods for Containment and Clean Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Ųр

7. Handling and storage

Handling

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

Storage

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

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
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

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Hydrochloric acid	Ceiling: 5 ppm	Ceiling: 5 ppm	CEV. 2 ppm
Tryanooniono doid	Ceiling: 7.5 mg/m ³	Ceiling: 7 mg/m ³	

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

Tightly fitting safety goggles. Face-shield.

Skin and body protection

Long sleeved clothing.

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.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State

Appearance

Odor

Odor Threshold

рH

Melting Point/Range

Boiling Point/Range

Flash Point

Evaporation Rate

Flammability (solid,gas)

Flammability or explosive limits

Upper

Lower

Vapor Pressure

Vapor Density

Specific Gravity

Solubility

Partition coefficient; n-octanol/water

Autoignition Temperature

Decomposition Temperature

Viscosity

Liquid

Clear

No information available

No information available

No information available (1N)

No data available

No information available

Not applicable

No information available

Not applicable

No data available

No data available

No information available

No information available

No information available

Soluble in water

No data available

No information available No information available

No information available

10. Stability and reactivity

Spot Indole Reagent

Reactive Hazard

None known, based on information available

Stability

Stable under normal conditions.

Conditions to Avoid

Incompatible products. Excess heat.

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Oral LD50 Dermal 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

ı	Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
	Hydrochloric acid	LD50 238 - 277 mg/kg (Rat)	LD50 > 5010 mg/kg (Rabbit)	LC50 = 1.68 mg/L (Rat)1 h

Toxicologically Synergistic

No information available

Products

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.

This product contains one or more substances which are classified by IARC as

carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly

carcinogenic to humans (Group 2B).

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Hydrochloric acid	7647-01-0	Not listed				
2-Propenal,	6203-18-5	Not listed				
3-[4-(dimethylamino)p						
henyl]-	·					

IARC: (International Agency for Research on Cancer)

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

Mutagenic Effects

No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Teratogenicity

No information available.

STOT - single exposure

Respiratory system

STOT - repeated exposure

None known

Aspiration hazard

No information available

Symptoms / effects, both acute and Ingestion causes severe swelling, severe damage to the delicate tissue and danger of

Spot Indole Reagent

delayed

perforation: Product is a corrosive material. Use of gastric lavage or emesis is

contraindicated. Possible perforation of stomach or esophagus should be investigated

Endocrine Disruptor Information

No information available

Other Adverse Effects

The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Harmful to aquatic organisms.

Freshwater Algae	Freshwater Fish	Microtox	Water Flea
-	282 mg/L LC50 96 h	4	-
Not listed	LC50: 5.38 - 6.47 mg/L, 96h flow-through (Pimephales promelas)	Not listed	Not listed
		- 282 mg/L LC50 96 h Not listed LC50: 5.38 - 6.47 mg/L, 96h flow-through (Pimephales	- 282 mg/L LC50 96 h - Not listed

Persistence and Degradability
Bioaccumulation/ Accumulation

Miscible with water Persistence is unlikely based on information available.

No information available.

Mobility

Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods

Should not be released into the environment.

14. Transport information

DOT

UN-No 178

HYDROCHLORIC ACID SOLUTION

Hazard Class

o II

Packing Group

UN-No

1789

Proper Shipping Name

Proper Shipping Name

HYDROCHLORIC ACID SOLUTION

Hazard Class
Packing Group

8 ||

IATA

UN-No UN1789

Proper Shipping Name

HYDROCHLORIC ACID SOLUTION

Hazard Class

8 |||

Packing Group IMDG/IMO

UN-No

UN1789

Proper Shipping Name

HYDROCHLORIC ACID SOLUTION

Hazard Class

8 |||

Packing Group

TENCONIZONIO NOID COLONIA

15. Regulatory information

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
Hydrochloric acid	Х	Х	-	231-595-7	-		Χ	Χ	Х	Χ	Х
2-Propenal,	Х	X	-	228-267-0	-		Х	Х	-	Х	-
3-[4-(dimethylamino)phenyl]-											

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)

Not applicable

CADA 242

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Hydrochloric acid	7647-01-0	9.9	1.0

SARA 311/312 Hazard Categories

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

CINIA (Class Mator Act)

CVVA (Clean vvaler Act)				
Component	CWA - Hazardous	• • • • • • • • • • • • • • • • • • • •	CWA - Toxic Pollutants	CWA - Priority Pollutants
•	Substances	Quantities		
Hydrochloric acid	X	5000 lb	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Hydrochloric acid	X		•

OSHA Occupational Safety and Health Administration

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

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
Hydrochloric acid	5000 lb	5000 lb

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know

Component Massachusetts New Jersey Pen		Pennsylvania	Illinois	Rhode Island	
Hydrochloric acid	Х	X	X	Х	X

U.S. Department of Transportation

Reportable Quantity (RQ):

Υ

DOT Marine Pollutant

Ν

DOT Severe Marine Pollutant

Ν

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	
. ,	greater)	

Other International Regulations

Mexico - Grade

No information available

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

E Corrosive material D1B Toxic materials D2B Toxic materials



16. Other information

Prepared By

Regulatory Affairs

Remel

Tel: 1-800-255-6730

Revision Date Print Date

10-Dec-2014 10-Dec-2014

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 in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of SDS

Thermo Fisher CIENTIFIC

SAFETY DATA SHEET

Revision Date 04-Feb-2015

Revision Number 1

1. Identification

Product Name

Bactidrop TM Voges Proskauer-A

Cat No.:

R21560

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

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

Flammable liquids

Category 2

Acute Inhalation Toxicity - Vapors

Category 4

Serious Eye Damage/Eye Irritation

Category 1 Category 1A

Carcinogenicity

Category 1

Specific target organ toxicity (single exposure)

Target Organs - Respiratory system, Central nervous system (CNS), Optic nerve. Specific target organ toxicity - (repeated exposure)

Category 1

Target Organs - Liver, Blood.

Label Elements

Signal Word

Danger

Hazard Statements

Highly flammable liquid and vapor

Harmful if swallowed

Causes serious eye damage

Harmful if inhaled May cause respiratory irritation May cause drowsiness or dizziness May cause cancer Causes damage to organs Causes 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

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

IF exposed: Call a POISON CENTER or doctor/physician

Inhalation

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

Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

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 or doctor/physician

Inaestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

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

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other hazards

Poison, may be fatal or cause blindness if swallowed. Vapor harmful. Cannot be made non-poisonous.

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 %
Ethyl alcohol	64-17-5	90
Methyl alcohol	67-56-1	5
alphaNaphthol	90-15-3	5

4. First-aid measures

General Advice

If symptoms persist, call a physician.

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. Obtain medical attention.

Inhalation

Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms/effects

Breathing difficulties. Causes eye burns. . Inhalation of high vapor concentrations may

cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Notes to Physician

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media

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

containers exposed to fire with water spray.

Unsuitable Extinguishing Media

No information available

Flash Point Method -

17 °C / 62.6 °F

No information available

Autoignition Temperature

Explosion Limits

No information available

Upper

No data available

Lower Sensitivity to Mechanical Impact No information available

No data available

Sensitivity to Static Discharge

No information available

Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

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 3

Flammability 4

Instability

Physical hazards

N/A

6. Accidental release measures

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions

Should not be released into the environment. See Section 12 for additional ecological

information.

Methods for Containment and Clean Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Up Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7. Handling and storage

Handling

Ensure adequate ventilation. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol	STEL: 1000 ppm	(Vacated) TWA: 1000 ppm (Vacated) TWA: 1900 mg/m³ TWA: 1000 ppm TWA: 1900 mg/m³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
Methyl alcohol	TWA: 200 ppm STEL: 250 ppm Skin	(Vacated) TWA: 200 ppm (Vacated) TWA: 260 mg/m³ (Vacated) STEL: 250 ppm (Vacated) STEL: 325 mg/m³ Skin TWA: 200 ppm	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Ethyl alcohol	TWA: 1000 ppm TWA: 1880 mg/m ³	TWA: 1000 ppm TWA: 1900 mg/m ³	STEL: 1000 ppm
Methyl alcohol	TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ Skin	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 310 mg/m³	TWA: 200 ppm STEL: 250 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. Ensure adequate ventilation, especially in confined areas. Use explosion-proof

electrical/ventilating/lighting/equipment.

Personal Protective Equipment

Eye/face Protection

Tightly fitting safety goggles. Face-shield.

Skin and body protection

Long sleeved clothing.

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.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Appearance Odor

Odor Threshold

На

Melting Point/Range Boiling Point/Range

Flash Point Evaporation Rate Flammability (solid,gas)

Flammability or explosive limits

Upper Lower

Vapor Pressure Vapor Density Specific Gravity

Solubility

Partition coefficient; n-octanol/water

Autoignition Temperature Decomposition Temperature

Viscosity

VOC Content(%)

Liquid Amber aromatic

No information available No information available No data available No information available 17 °C / 62.6 °F

17 °C / 62,6 °F No information available

Not applicable

No data available No data available No information available No information available No information available

No information available Miscible with water No data available No information available

No information available No information available

100

10. Stability and reactivity

Reactive Hazard

None known, based on information available

Stability

Stable under normal conditions.

Conditions to Avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

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

Category 4. ATE = 300 - 2000 mg/kg.

Dermal LD50

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

Category 4. ATE = 10 - 20 mg/l.

Vapor LC50 Component Information

Component Information Component	LD50 Orai	LD50 Dermal	LC50 Inhalation
Ethyl alcohol	LD50 = 7060 mg/kg (Rat)	Not listed	20000 ppm/10H (Rat)
Methyl alcohol	Calc. ATE 60 mg/kg (Human evidence) LD50 = 6200 mg/kg (Rat)	Calc. ATE 60 mg/kg (Human evidence) LD50 = 6200 mg/kg (Rat)	Calc. ATE 0.6 mg/L (vapours) or 0.5 mg/L (mists) (Human evidence) LC50 = 64000 ppm (Rat) 4 h 83.2 mg/L (Rat) 4 h
.alphaNaphthol	LD50 = 1870 mg/kg (Rat)	LD50 = 880 mg/kg (Rabbit)	LC50 > 420 mg/m³ (Rat) 1 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.

This product contains one or more substances which are classified by IARC as

carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly

carcinogenic to humans (Group 2B). Ethanol has been shown to be carcinogenic in long-term studies only when consumed and abused as an alcoholic beverage.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Ethyl alcohol	64-17-5	Group 1	Known	A3 ·	X	Not listed
Methyl alcohol	67-56-1	Not listed				
alpha -Nanhthol	90-15-3	Not listed				

IARC: (International Agency for Research on Cancer)

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

ACGIH: (American Conference of Governmental Industrial

Hygienists)

A1 - Known Human Carcinogen A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

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) Optic nerve

STOT - repeated exposure

Liver Blood

Aspiration hazard

No information available

delayed

Symptoms / effects, both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

tiredness, nausea and vomiting

Endocrine Disruptor Information

Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
.alphaNaphthol	Group III Chemical	Not applicable	Not applicable
	The toxicological properties ha	ive not been fully investigated.	

12. Ecological information

Contains a substance which is:. Toxic to aquatic organisms. The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Ethyl alcohol	EC50 (72h) = 275 mg/l (Chlorella vulgaris)	LC50 = 14200 mg/l/96h	Photobacterium phosphoreum:EC50 = 34634 mg/L/30 min Photobacterium phosphoreum:EC50 = 35470 mg/L/5 min	
Methyl alcohol	Not listed	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	EC50 > 10000 mg/L, 24h
.alphaNaphthol	Not listed	LC50: = 0.75 mg/L, 96h	Not listed	Not listed

static (Lepomis macrochirus)	
LC50; = 3.57 mg/L, 96h	
flow-through (Pimephales	
promelas)	

Persistence and Degradability Bioaccumulation/ Accumulation

Persistence is unlikely No information available.

Mobility

Component	log Pow
Ethyl alcohol	-0.32
Methyl alcohol	-0.74
.aiphaNaphthol	2,84

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.

1	Component	RCRA - U Series Wastes		RCRA - P Series Wastes	
	Methyl alcohol - 67-56-1	U154	-	-	

14. Transport information

DOT

UN-No Proper Shipping Name UN1987 ALCOHOLS, N.O.S.

Hazard Class
Packing Group

3 ||

TDG

UN-No UN1987

Proper Shipping Name ALCOH

Hazard Class
Packing Group

ALCOHOLS, N.O.S.

IATA

<u>UN-No</u> UN1987

Proper Shipping Name ALCOHOLS, N.O.S.

Hazard Class

Packing Group

H

IMDG/IMO

UN-No UN1987

Proper Shipping Name

ALCOHOLS, N.O.S.

Hazard Class

<u>ي</u>

Packing Group

15. Regulatory information

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
Ethyl alcohol	X	Х	-	200-578-6	-		Х	Χ	Χ	Χ	X
Methyl alcohol	Х	X	-	200-659-6	-		Х	Х	X	X	X
.alphaNaphthol	Х	Х	_	201-969-4	-		Х	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)

Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Methyl alcohol	67-56-1	5	1.0

SARA 311/312 Hazard Categories

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

CWA (Clean Water Act)

Not applicable

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Methyl alcohol	X		-

OSHA Occupational Safety and Health Administration

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
Methyl alcohol	5000 lb	•

California Proposition 65

This product contains the following proposition 65 chemicals

٦	Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
	Ethyl alcohol	64-17-5	Development (alcoholic beverages only)	-	Developmental Carcinogen
	Methyl alcohol	67-56-1	Developmental	_	Developmental

U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethyl alcohol	X	X	X	X	X
Methyl alcohol	Х	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ):

Υ

DOT Marine Pollutant

N

DOT Severe Marine Pollutant

N

U.S. Department of Homeland Security

Bactidrop TM Voges Proskauer-A

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

B2 Flammable liquid D2A Very toxic materials E Corrosive material D1B Toxic materials



16. Other information

Prepared By

Regulatory Affairs

Remel

Tel: 1-800-255-6730

Revision Date

04-Feb-2015

Print Date

04-Feb-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 in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of SDS

ThermoFisher SCIENTIFIC

SAFETY DATA SHEET

Revision Date 17-Feb-2015

Revision Number 1

1. Identification

Product Name

Bactidrop TM Voges Proskauer-B

Cat No.:

R21562

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)

Acute oral toxicity

Skin Compaign/Initation

Category 4 Category 4

Serious Eye Damage/Eye Irritation

Category 1

Specific target organ toxicity (single exposure)

Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Danger

Hazard Statements

Harmful if swallowed

Causes severe skin burns and eye damage

May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

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

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

Use only outdoors or in a well-ventilated area

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

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

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

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

Ingestion

Rinse mouth

Do NOT induce vomiting

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

3. Composition / information	

1	Component	CAS-No	Weight %	l
	Potassium hydroxide	1310-58-3	30	l

Firekald massures

Immediate medical attention is required. Show this safety data sheet to the doctor in **General Advice**

attendance.

Immediate medical attention is required. Rinse immediately with plenty of water, also under Eye Contact

the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Get medical attention

immediately if irritation persists.

Consult a physician. Wash off immediately with soap and plenty of water while removing all **Skin Contact**

contaminated clothes and shoes.

Move to fresh air. Call a physician or Poison Control Center immediately. If not breathing, Inhalation

give artificial respiration. If breathing is difficult, give oxygen.

Immediate medical attention is required. Do not induce vomiting. Drink plenty of water. Ingestion

Never give anything by mouth to an unconscious person. Remove from exposure, lie down.

Clean mouth with water and drink afterwards plenty of water. Call a physician or Poison

Control Center immediately.

Most important symptoms/effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue

and danger of perforation

Notes to Physician

Treat symptomatically

5. Fire-fighting measures

Unsuitable Extinguishing Media

No information available

Flash Point Method -

No information available 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

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Hazardous Combustion Products

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

Flammability

Instability

Physical hazards N/A

6. Accidental release measures

Personal Precautions

Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

Refer to protective measures listed in Sections 7 and 8

Environmental Precautions

Do not allow material to contaminate ground water system. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use personal protective equipment. Up

7. Handling and storage

Handling

No information available. Avoid contact with skin. Ensure adequate ventilation. Do not taste or swallow. Do not get in eyes, on skin, or on clothing. This material should be handled at the biosafety level 2 (BSL2) as required by OSHA Bloodborne Pathogen Rule (29 CFR

1910.1030.7).

Storage

Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide	Ceiling: 2 mg/m³	(Vacated) Ceiling: 2 mg/m³	Ceiling: 2 mg/m³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Potassium hydroxide	Ceiling: 2 mg/m³		CEV: 2 mg/m³

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 adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection

Tightly fitting safety goggles. Face-shield.

Skin and body protection

impervious clothing. Impervious gloves. Boots. Chemical resistant apron.

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.

Hygiene Measures

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. For environmental protection remove and wash all contaminated protective equipment before re-use. Wear suitable gloves and eye/face protection.

9. Physical and chemical properties

Liquid

No information available

Physical State Appearance

Clear

No information available Odor No information available **Odor Threshold**

> 12 Melting Point/Range No data available No information available **Boiling Point/Range** No information available Flash Point No information available **Evaporation Rate**

Flammability (solid.gas) Flammability or explosive limits

No data available Upper No data available Lower No information available Vapor Pressure

Vapor Density No information available No information available Relative Density Soluble in water Solubility

No data available Partition coefficient; n-octanol/water

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

10. Stability and reactivity

Reactive Hazard

None known, based on information available

Stability

Stable under normal conditions.

Conditions to Avoid

Exposure to air or moisture over prolonged periods.

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

11. Toxicological information

Acute Toxicity

Oral LD50 Dermal LD50 Vapor LC50

Category 4. ATE = 300 - 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.

nnonent information

COMPONENT INVINGUOU			
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide	284 mg/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic

No information available

Products

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.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Potassium hydroxide	1310-58-3	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

STOT - repeated exposure

None known

Aspiration hazard

No information available

delayed

Symptoms / effects, both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Endocrine Disruptor Information

No information available

Other Adverse Effects

The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Harmful to aquatic organisms. Contains a substance which is:. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Potassium hydroxide	Not listed	80 mg/L LC50 96 h	Not listed	Not listed

Persistence and Degradability

No information available

Revision Date 17-Feb-2015

Bactidrop TM Voges Proskauer-B

Bioaccumulation/ Accumulation

No information available.

Mobility

No information available.

Component	log Pow
Potassium hydroxide	0.83

13. Disposal considerations

Waste Disposal Methods

Should not be released into the environment.

14. Transport information

DOT

UN-No

1814

Proper Shipping Name

POTASSIUM HYDROXIDE SOLUTION

Hazard Class

8

Packing Group

8

<u>TDG</u>

UN-No

1814

Proper Shipping Name

POTASSIUM HYDROXIDE SOLUTION

Hazard Class Packing Group 8 ||

IATA

UN-No

1814

Proper Shipping Name

POTASSIUM HYDROXIDE SOLUTION

Hazard Class Packing Group 8 11

IMDG/IMO

UN-No

1814

Proper Shipping Name

POTASSIUM HYDROXIDE SOLUTION

Hazard Class Packing Group

8 II

15. Regulatory information

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

International Inventories

i	Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
	Potassium hydroxide	Х	Χ	-	215-181-3	-		Χ	Χ	Х	Х	X
,	l 4.											

Legend:

hateil__X

- 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)

Not applicable

SARA 313

Not applicable

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

Cicali tratel Act				
Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Potassium hydroxide	X	1000 lb	-	-

Clean Air Act

Not applicable

OSHA Occupational Safety and Health Administration Not applicable

CERCLA

Not applicable

Component	Hazardous Substances RQs	CERCLA EHS RQs
Potassium hydroxide	1000 lb	-

California Proposition 65

This product does not contain any Proposition 65 chemicals

State Right-to-Know

	otate Highterto-Hillon					
Component		Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
	Potassium hydroxide	X	X	Х	-	Х

U.S. Department of Transportation

Reportable Quantity (RQ): N
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

D1B Toxic materials E Corrosive material D2B Toxic materials



16. Other information

Prepared By

Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Revision Date Print Date Revision Summary 17-Feb-2015 17-Feb-2015

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Harmonized System of Classification and Labeling of Chemicals (GHS)

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End of SDS