Printing date: January 8, 2015 Revision: January 8, 2015

1 Identification

· Product identifier

· Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

· Product code: 905 (1006320)

· CAS Number:

67-63-0

· Recommended use and restriction on use

· Recommended use: NarcoPouch Barbiturates Presumptive Screening Test

· Restrictions on use: Contact manufacturer

· Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Safariland, LLC

13386 International Parkway

Jacksonville, FL 32218

Customer Care (800) 347-1200

· Emergency telephone number:

ChemTel Inc.

+1 (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

· Classification of the substance or mixture

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Eye Irrit. 2A H319 Causes serious eye irritation.

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.

Carc. 1B H350 May cause cancer. Route of exposure: Inhalation.

Repr. 1B H360 May damage fertility or the unborn child.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · Label elements
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:







GHS02 GHS07 GHS08

· Signal word: Danger

· Hazard-determining components of labeling:

propan-2-ol cobalt acetate

· Hazard statements:

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

(Cont'd. on page 2)

Printing date: January 8, 2015 Revision: January 8, 2015

Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 1)

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

H317 May cause an allergic skin reaction.

H350 May cause cancer. Route of exposure: Inhalation.

H360 May damage fertility or the unborn child.

H336 May cause drowsiness or dizziness.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing mist/vapors/spray. P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P233 Keep container tightly closed.

Use only outdoors or in a well-ventilated area. P271

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. P304+P340

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention. P337+P313

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P308+P313 IF exposed or concerned: Get medical advice/attention.

Store locked up. P405

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

Other hazards

There are no other hazards not otherwise classified that have been identified.

0 % of the mixture consists of component(s) of unknown toxicity.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

67-63-0 propan-2-ol

· Dangerous components:

71-48-7 cobalt acetate

 $0.1 - 1\overline{\%}$

🕸 Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1B, H350; Repr. 1B, H360

Skin Sens. 1, H317

(Cont'd. on page 3)

Printing date: January 8, 2015 Revision: January 8, 2015

Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 2)

4 First-aid measures

· Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Remove breathing apparatus 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.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Asthma attacks

Dizziness

Coughing

Irritant to eyes.

Allergic reactions

· Danger:

May cause cancer. Route of exposure: Inhalation.

Danger of impaired breathing.

May damage fertility or the unborn child.

May cause drowsiness or dizziness.

· Indication of any immediate medical attention and special treatment needed:

If necessary oxygen respiration treatment.

Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

Contains cobalt acetate. May produce an allergic reaction.

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

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

- · For safety reasons unsuitable extinguishing agents: None.
- · Special hazards arising from the substance or mixture

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

- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

(Cont'd. on page 4)

Printing date: January 8, 2015 Revision: January 8, 2015

Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 3)

· Additional information:

Eliminate all ignition sources if safe to do so. Cool endangered product with water spray.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures:

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

Protect from heat.

· Environmental precautions:

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

Inform respective authorities in case of seepage into water course or sewage system.

· Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).

Dispose contaminated material as waste according to item 13.

Send for recovery or disposal in suitable receptacles.

· 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.

7 Handling and storage

· Handling

· Precautions for safe handling:

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Keep respiratory protective device available.

Flammable gas-air mixtures may be formed in empty containers/receptacles.

Highly flammable liquid and vapor.

· Conditions for safe storage, including any incompatibilities

- · Storage
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Provide ventilation for receptacles.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

• Further information about storage conditions: Keep containers tightly sealed.

(Cont'd. on page 5)

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Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 4)

· Specific end use(s): No relevant information available.

8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplace:			
67-63-0 propan	67-63-0 propan-2-ol		
PEL (USA)	Long-term value: 980 mg/m³, 400 ppm		
REL (USA)	Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm		
TLV (USA)	Short-term value: 984 mg/m³, 400 ppm Long-term value: 492 mg/m³, 200 ppm BEI		
EL (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm		
EV (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm		
LMPE (Mexico)	Short-term value: 400 ppm Long-term value: 200 ppm A4, IBE		
71-48-7 cobalt	acetate		
PEL (USA)	Long-term value: 0.1* mg/m³ as Co; *for metal dust and fume		
REL (USA)	Long-term value: 0.05 mg/m³ as Co; metal dust & fume		
TLV (USA)	Long-term value: 0.02 mg/m³ as Co, BEI		
EL (Canada)	Long-term value: 0.02 mg/m³ as Co; IARC 2B		
LMPE (Mexico)	Long-term value: 0.02 mg/m³ A3, IBE; como Co		

· Ingredients with biological limit values:

67-63-0 propan-2-ol

BEI (USA) 40 mg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: Acetone (background, nonspecific)

- · Exposure controls
- Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

(Cont'd. on page 6)

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Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 5)

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

- · Engineering controls: No relevant information available.
- · Breathing equipment: Not required under normal conditions of use.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Eye protection:



Safety glasses

· Limitation and supervision of exposure into the environment

No relevant information available.

9 Physical and chemical properties		
· Information on basic physical and chemical properties · Appearance:		
Form: Color: Odor: Odor threshold:	Liquid Colorless Alcohol-like Not determined.	
 pH-value: Melting point/Melting range: Boiling point/Boiling range: 	neutral -89.5 °C (-129 °F) 82 °C (180 °F)	
· Flash point:	13 °C (55 °F)	
· Flammability (solid, gaseous):	Not applicable.	
· Auto-ignition temperature:	425 °C (797 °F)	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Not determined.	
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
Explosion limitsLower:Upper:Oxidizing properties:	2 Vol % 12 Vol % Not determined.	
· Vapor pressure at 20 °C (68 °F):	43 hPa (32 mm Hg)	
	(Cont'd. on page 7)	

(Cont'd. on page 7)

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Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 6)

• **Density at 20 °C (68 °F):** 0.79 g/cm³ (6.593 lbs/gal)

Relative density: Not determined.
Vapor density: Not determined.
Evaporation rate: Not determined.

· Solubility in / Miscibility with

Water at 20 °C (68 °F): 1.000 g/l Easily soluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity

Dynamic: Not determined. **Kinematic:** Not determined.

• Other information No relevant information available.

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions:

Highly flammable liquid and vapor.

Reacts with oxidizing agents.

Used empty containers may contain product gases which form explosive mixtures with air.

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.

Toxic fumes may be released if heated above the decomposition point.

· Conditions to avoid:

Keep ignition sources away - Do not smoke.

Store away from oxidizing agents.

- · Incompatible materials: No relevant information available.
- · Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Toxic metal oxide smoke

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:				
67-63-0 pi	67-63-0 propan-2-ol			
Oral	LD50	5045 mg/kg (rat)		
Dermal	LD50	12800 mg/kg (rabbit)		
Inhalative	LC50/4h	30 mg/l (rat)		

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(Cont'd. of page 7)

- · Primary irritant effect:
- · On the eye: Irritating effect.
- · Sensitization:

Contains cobalt acetate. May produce an allergic reaction.

Sensitizing effect by skin contact is possible with prolonged exposure.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer):		
67-63-0	propan-2-ol	3
71-48-7	cobalt acetate	2B

· NTP (National Toxicology Program):

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration):

Substance is not listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity):

May cause drowsiness or dizziness.

Irritating to eyes.

· Repeated dose toxicity:

Danger of very serious irreversible effects.

May cause sensitisation by inhalation and skin contact.

May cause cancer. Route of exposure: Inhalation.

May damage fertility or the unborn child.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Carc. 1B, Repr. 1B

- · Carcinogenicity: May cause cancer. Route of exposure: Inhalation.
- · Reproductive toxicity: May damage fertility or the unborn child.
- · STOT-single exposure: May cause drowsiness or dizziness.
- · 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.

12 Ecological information

- · Toxicity
- · Aquatic toxicity Toxic for aquatic organisms
- · Persistence and degradability No relevant information available.
- · Behavior in environmental systems
- · Bioaccumulative potential: No relevant information available.
- · Mobility in soil: No relevant information available.
- Ecotoxical effects:
- · Remark: Harmful to fish

(Cont'd. on page 9)

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Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 8)

Additional ecological information

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Harmful to aquatic organisms

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

· Other adverse effects: No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number

· DOT, ADR, IMDG, IATA UN1219

· UN proper shipping name



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).

· DOT, IATA Isopropanol

• ADR 1219 ISOPROPANOL (contains cobalt acetate),

ENVIRONMENTALLY HAZARDOUS

• IMDG ISOPROPANOL (contains cobalt acetate), MARINE

POLLUTANT

- · Transport hazard class(es)
- · DOT



· Class 3 Flammable liquids

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Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

	(Cont'd. of page 9)
· Label	3
· ADR	
· Class · Label	3 (F1) Flammable liquids 3
·IMDG	
· Class	3 Flammable liquids
· Label	3
· IATA	
· Class	3 Flammable liquids
· Label	3
· Packing group · DOT, ADR, IMDG, IATA	II
· Environmental hazards	Product contains environmentally hazardous substances: cobalt acetate
· Marine pollutant:	Yes
· Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
Special precautions for user Danger code (Kemler): EMS Number:	Warning: Flammable liquids 33 F-E,S-D
Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	·
· Transport/Additional information:	
· ADR	
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
	(Cont'd. on page 11)

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Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 10)

· IMDG

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- · SARA
- · Section 302 (extremely hazardous substances):

Substance is not listed.

· Section 304 (emergency release notification):

Substance is not listed.

· Sections 311/312 (hazardous chemical threshold planning quantity in pounds):

Substance is not listed.

· Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is listed.

· TSCA (Toxic Substances Control Act)

Substance is listed.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency):

Substance is not listed.

· IARC (International Agency for Research on Cancer):

67-63-0 propan-2-ol 3
71-48-7 cobalt acetate 2B

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Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 11)

· NIOSH-Ca (National Institute for Occupational Safety and Health):

Substance is not listed.

· Canadian substance listings

· Canadian Domestic Substances List (DSL):

Substance is listed.

· Canadian Ingredient Disclosure list (limit 0.1%):

Substance is not listed.

· Canadian Ingredient Disclosure list (limit 1%):

Substance is listed.

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.

· Date of preparation / last revision January 8, 2015 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Muta. 2: Germ cell mutagenicity, Hazard Category 2

Carc. 1B: Carcinogenicity, Hazard Category 1B

Repr. 1B: Reproductive toxicity, Hazard Category 1B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

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Printing date: January 8, 2015 Revision: January 8, 2015

Trade name: ODV Dille-Koppanyi Reagent 1st Ampoule

(Cont'd. of page 12)

1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com

Printing date: January 8, 2015 Revision: January 8, 2015

1 Identification

- · Product identifier
- · Trade name: ODV Dille-Koppanyi Reagent 2nd Ampoule
- · Product code: 905 (1006320)
- · Recommended use and restriction on use
- · Recommended use: NarcoPouch Barbiturates Presumptive Screening Test
- · Restrictions on use: Contact manufacturer
- · Details of the supplier of the Safety Data Sheet
- · Manufacturer/Supplier:

Safariland, LLC

13386 International Parkway Jacksonville, FL 32218

Customer Care (800) 347-1200

· Emergency telephone number:

ChemTel Inc.

+1 (800)255-3924, +1 (813)248-0585



2 Hazard(s) identification

· Classification of the substance or mixture

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:





GHS02 GHS07

· Signal word: Danger

· Hazard-determining components of labeling:

propan-2-ol

2-aminopropane

· Hazard statements:

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

· Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing mist/vapors/spray.

P280 Wear protective gloves and eye protection.

P233 Keep container tightly closed.

(Cont'd. on page 2)

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Trade name: ODV Dille-Koppanyi Reagent 2nd Ampoule

(Cont'd. of page 1)

P271 Use only outdoors or in a well-ventilated area.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P405 Store locked up.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

Other hazards

There are no other hazards not otherwise classified that have been identified.

0 % of the mixture consists of component(s) of unknown toxicity.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Danger	· Dangerous components:			
67-63-0	propan-2-ol	Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	>80%	
75-31-0	2-aminopropane	♦ Flam. Liq. 1, H224♦ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	2.5-5%	

· Additional information:

For the listed ingredient(s), the identity and exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: If skin irritation continues, consult a doctor.
- · After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· Most important symptoms and effects, both acute and delayed:

Dizziness

Coughing

Irritant to eyes.

Danger: May cause drowsiness or dizziness.

(Cont'd. on page 3)

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Trade name: ODV Dille-Koppanyi Reagent 2nd Ampoule

(Cont'd. of page 2)

· Indication of any immediate medical attention and special treatment needed:

If necessary oxygen respiration treatment.

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: None.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information:

Eliminate all ignition sources if safe to do so.

Cool endangered product with water spray.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation.

Keep away from ignition sources.

Protect from heat.

Environmental precautions:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable receptacles.

· 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.

7 Handling and storage

- · Handling
- · Precautions for safe handling:

Prevent formation of aerosols.

Use only in well ventilated areas.

(Cont'd. on page 4)

Printing date: January 8, 2015 Revision: January 8, 2015

Trade name: ODV Dille-Koppanyi Reagent 2nd Ampoule

(Cont'd. of page 3)

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Flammable gas-air mixtures may be formed in empty containers/receptacles.

- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Provide ventilation for receptacles.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Keep containers tightly sealed.

· Specific end use(s): No relevant information available.

8 Exposure controls/personal protection

· Control parameters			
· Components with limit values that require monitoring at the workplace: 67-63-0 propan-2-ol			
PEL (USA)	Long-term value: 980 mg/m³, 400 ppm		
REL (USA)	Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm		
TLV (USA)	Short-term value: 984 mg/m³, 400 ppm Long-term value: 492 mg/m³, 200 ppm BEI		
EL (Canada)	da) Short-term value: 400 ppm Long-term value: 200 ppm		
EV (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm		
LMPE (Mexico)	Short-term value: 400 ppm Long-term value: 200 ppm A4, IBE		
75-31-0 2-amin	opropane		
PEL (USA)	Long-term value: 12 mg/m³, 5 ppm		
TLV (USA)	Short-term value: 24 mg/m³, 10 ppm Long-term value: 12 mg/m³, 5 ppm		
EL (Canada)	Short-term value: 10 ppm Long-term value: 5 ppm		
EV (Canada)	Short-term value: 24 mg/m³, 10 ppm Long-term value: 12 mg/m³, 5 ppm		
	1	(Cont'd. on page 5	

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LMPE (Mexico) Short-term value: 10 ppm Long-term value: 5 ppm

· Ingredients with biological limit values:

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BEI (USA) 40 mg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: Acetone (background, nonspecific)

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- Engineering controls: No relevant information available.
- · Breathing equipment: Not required under normal conditions of use.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Eye protection:



Safety glasses

- · Body protection: Not required under normal conditions of use.
- · Limitation and supervision of exposure into the environment

No relevant information available.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Liquid
Color: Colorless
Odor: Characteristic
Odor threshold: Not determined.

pH-value: Not determined.Melting point/Melting range: Not determined.

• **Boiling point/Boiling range**: >35 °C (>95 °F) (Estimate)

· Flash point: 13 °C (55 °F)

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· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	403 °C (757 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
Explosion limitsLower:Upper:Oxidizing properties:	2.0 Vol % 12.0 Vol % Not determined.
· Vapor pressure at 20 °C (68 °F):	43 hPa (32 mm Hg)
 Density at 20 °C (68 °F): Relative density: Vapor density: Evaporation rate: 	0.78 g/cm³ (6.509 lbs/gal) Not determined. Not determined. Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/wate	r): Not determined.
Viscosity Dynamic: Kinematic: Other information	Not determined. Not determined. No relevant information available.

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions:

Highly flammable liquid and vapor.

Reacts with oxidizing agents.

Used empty containers may contain product gases which form explosive mixtures with air.

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.

Liquefied material may release toxic fumes.

· Conditions to avoid:

Keep ignition sources away - Do not smoke.

Store away from oxidizing agents.

- · Incompatible materials: No relevant information available.
- · Hazardous decomposition products:

Carbon monoxide and carbon dioxide

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Nitrogen oxides

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

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 Oral
 LD50
 5045 mg/kg (rat)

 Dermal
 LD50
 12800 mg/kg (rabbit)

 Inhalative
 LC50/4h
 30 mg/l (rat)

- · Primary irritant effect:
- · On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Irritating effect.
- · Carcinogenic categories
- IARC (International Agency for Research on Cancer):

67-63-0 propan-2-ol

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· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eve contact.

Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity):

Vapors have narcotic effect.

May cause drowsiness or dizziness.

Irritating to eyes.

- · Repeated dose toxicity: No relevant information available.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- \cdot Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: May cause drowsiness or dizziness.
- · 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.

12 Ecological information

- · Toxicity
- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.

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- · Behavior in environmental systems
- · Bioaccumulative potential: No relevant information available.
- · Mobility in soil: No relevant information available.
- · Additional ecological information
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

• Other adverse effects: No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- Uncleaned packagings
- Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number

· DOT, ADR, IMDG, IATA UN1993

· UN proper shipping name



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).

· DOT Flammable liquids, n.o.s. (propan-2-ol,

Isopropylamine)

· ADR 1993 FLAMMABLE LIQUID, N.O.S. (propan-2-ol,

ISOPROPYLAMINE)

• IMDG FLAMMABLE LIQUID, N.O.S. (propan-2-ol,

ISOPROPYLAMINE)

• IATA Flammable liquid, n.o.s. (propan-2-ol, Isopropylamine)

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· Transport hazard class(es)	
· DOT	
· · · · · · · · · · · · · · · · · · ·	
· Class · Label	3 Flammable liquids 3
· ADR	
· ·	
· Class	3 (F1) Flammable liquids
· Label	3
· IMDG, IATA	
· Class · Label	3 Flammable liquids 3
· Packing group · DOT, ADR, IMDG, IATA	П
Environmental hazardsMarine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
Danger code (Kemler): EMS Number:	33 F-E,S-E
· Transport in bulk according to Annex II o MARPOL73/78 and the IBC Code	`
· Transport/Additional information:	
· ADR · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

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15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 304 (emergency release notification):

None of the ingredients are listed.

· Sections 311/312 (hazardous chemical threshold planning quantity in pounds):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

67-63-0 propan-2-ol

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

67-63-0 propan-2-ol

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· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

- · Canadian substance listings
- · Canadian Domestic Substances List (DSL):

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

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· Canadian Ingredient Disclosure list (limit 1%):

All ingredients are listed.

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.

· Date of preparation / last revision January 8, 2015 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Lig. 1: Flammable liquids, Hazard Category 1

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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