

HYDRANAL™-Coulomat AD**34810-6X500ML-US**

Version 1.1

Revision Date 02/05/2018

Print Date 02/05/2018

SECTION 1. IDENTIFICATION

Product name : HYDRANAL™-Coulomat AD

Number : 000000022638

Product Use Description : Laboratory chemicals
Scientific research and development

Manufacturer or supplier's details : Manufactured by:
Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442
USA

Distributed by:
VWR International
2360 Argentia Road
Mississauga, Ontario L5N 5Z7
CANADA

For more information call : 1-800-932-5000
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : liquid

Color : light yellow

Odor : aromatic

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Classification of the substance or mixture

Classification of the substance or mixture : Flammable liquids, Category 2
Acute toxicity, Category 4, Inhalation
Serious eye damage, Category 1
Reproductive toxicity, Category 1B
Specific target organ toxicity - single exposure, Category 1,
Eyes, Nervous system, Systemic toxicity
Specific target organ toxicity - repeated exposure, Category 2,
Liver, Blood, Kidney

GHS Label elements, including precautionary statements

Symbol(s)



Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapour.
Causes serious eye damage.
Harmful if inhaled.
May damage fertility or the unborn child.
Causes damage to organs.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

: **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
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.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

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Response:

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

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

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/doctor.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

Store in a well-ventilated place. Keep cool.

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity

IARC: Diethanolamine 111-42-2
Group 2B: Possibly carcinogenic to humans

ACGIH: Diethanolamine 111-42-2
A3: Confirmed animal carcinogen

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Methanol	67-56-1	>=70.00 - <90.00 %
Diethanolamine	111-42-2	>=10.00 - <20.00 %
Sulphur dioxide	7446-09-5	>=5.00 - <10.00 %

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1H-Imidazole monohydriodide	68007-08-9	>=5.00 - <10.00 %
Imidazole	288-32-4	>=1.00 - <5.00 %

SECTION 4. FIRST AID MEASURES

General advice	:	First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.
Inhalation	:	Move to fresh air. Keep patient warm and at rest. Call a physician immediately.
Skin contact	:	Wash off immediately with plenty of water. If skin irritation persists, call a physician.
Eye contact	:	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Protect unharmed eye.
Ingestion	:	When swallowed, allow water to be drunk. Call a physician immediately.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray Foam Carbon dioxide (CO ₂) Dry powder
Unsuitable extinguishing media	:	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards during firefighting	:	Flammable. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. In case of fire hazardous decomposition products may be produced such as: Carbon monoxide

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Carbon dioxide (CO₂)
 nitrogen oxides (NO_x)
 Sulphur oxides
 Hydrogen halides

Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.
 Evacuate personnel to safe areas.
 Wear personal protective equipment. Unprotected persons must be kept away.
 Ensure adequate ventilation.

Environmental precautions : Should not be released into the environment.

Methods and materials for containment and cleaning up : Ventilate the area.
 No sparking tools should be used.
 Use explosion-proof equipment.
 Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE
Handling

Precautions for safe handling : Wear personal protective equipment.
 Use only in well-ventilated areas.

Advice on protection against fire and explosion : Keep product and empty container away from heat and sources of ignition.
 No smoking.
 Take precautionary measures against static discharges.
 Vapours may form explosive mixtures with air.

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Storage

Conditions for safe storage, including any incompatibilities : Store in area designed for storage of flammable liquids. Protect from physical damage.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Store in original container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Do not breathe vapours or spray mist.

Engineering measures : Use with local exhaust ventilation.
Prevent vapour buildup by providing adequate ventilation during and after use.

Eye protection : Safety goggles

Hand protection : Solvent-resistant gloves (butyl-rubber)
Gloves must be inspected prior to use.
Replace when worn.

Skin and body protection : Protective suit

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene measures : Take off all contaminated clothing immediately.
Remove and wash contaminated clothing before re-use.
Wash hands before breaks and at the end of workday.
When using do not eat or drink.

Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis

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Methanol	67-56-1	TWA : Time weighted average	262 mg/m3 (200 ppm)	10 2006	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)
Methanol	67-56-1	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	10 2006	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)
Methanol	67-56-1	STEL : Short term exposure limit	328 mg/m3 (250 ppm)	10 2006	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)
Methanol	67-56-1	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	07 2007	CAD BC OEL:Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

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Methanol	67-56-1	STEL : Short term exposure limit	(250 ppm)	07 2007	CAD BC OEL:Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)
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Methanol	67-56-1	TWA : Time weighted average	(200 ppm)	07 2007	CAD BC OEL:Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)
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Methanol	67-56-1	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	03 2011	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)
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Methanol	67-56-1	STEL : Short term exposure limit	(250 ppm)	03 2011	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)
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Methanol	67-56-1	TWA : Time weighted average	(200 ppm)	03 2011	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)
Methanol	67-56-1	STEL : Short Term Exposure Limit (STEL):	(250 ppm)	11 2010	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)
Methanol	67-56-1	TWA : Time weighted average	(200 ppm)	11 2010	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)
Methanol	67-56-1	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	12 2007	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)
Methanol	67-56-1	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

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Methanol	67-56-1	15 MIN ACL : 15 minute average contamin ation limit:	(250 ppm)	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)
Methanol	67-56-1	8 HR ACL : 8 hour average contamin ation limit:	(200 ppm)	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)
Methanol	67-56-1	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)
Methanol	67-56-1	TWA : Time weighted average	262 mg/m3 (200 ppm)	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)
Methanol	67-56-1	STEL : Short term exposure limit	328 mg/m3 (250 ppm)	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

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Diethanolamine	111-42-2	TWA : Time weighted average	2 mg/m3	07 2009	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)
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Diethanolamine	111-42-2	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	10 2006	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)
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Diethanolamine	111-42-2	TWA : Time weighted average	2 mg/m3	09 2011	CAD BC OEL:Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)
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Diethanolamine	111-42-2	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	09 2011	CAD BC OEL:Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)
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Diethanolamine	111-42-2	TWA : Time weighted average	1 mg/m3	03 2011	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)
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Further information	:	Form of exposure : Inhalable fraction and vapor.			
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Diethanolamine	111-42-2	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	03 2011	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)
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Further information	:	Form of exposure : Inhalable fraction and vapor.			
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Diethanolamine	111-42-2	TWA : Time weighted average	1 mg/m3	11 2010	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)
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Further information	:	Form of exposure : Inhalable fraction and vapor.			
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Diethanolamine	111-42-2	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	11 2010	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)
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Further information	:	Form of exposure : Inhalable fraction and vapor.			
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Diethanolamine	111-42-2	8 HR ACL : 8 hour average contamin ation limit:	2 mg/m3	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)
Diethanolamine	111-42-2	15 MIN ACL : 15 minute average contamin ation limit:	4 mg/m3	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)
Diethanolamine	111-42-2	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)
Diethanolamine	111-42-2	TWA : Time weighted average	13 mg/m3 (3 ppm)	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)
Diethanolamine	111-42-2	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

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Sulphur dioxide	7446-09-5	TWA : Time weighted average	5.2 mg/m ³ (2 ppm)	10 2006	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)
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Sulphur dioxide	7446-09-5	STEL : Short term exposure limit	13 mg/m ³ (5 ppm)	10 2006	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)
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Sulphur dioxide	7446-09-5	TWA : Time weighted average	(2 ppm)	07 2007	CAD BC OEL:Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)
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Sulphur dioxide	7446-09-5	STEL : Short term exposure limit	(5 ppm)	07 2007	CAD BC OEL:Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)
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Sulphur dioxide	7446-09-5	STEL : Short term exposure limit	(0.25 ppm)	03 2011	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)
Sulphur dioxide	7446-09-5	TWA : Time weighted average	5.2 mg/m3 (2 ppm)	12 2007	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)
Sulphur dioxide	7446-09-5	STEL : Short Term Exposure Limit (STEL):	10.4 mg/m3 (5 ppm)	12 2007	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)
Sulphur dioxide	7446-09-5	8 HR ACL : 8 hour average contamin ation limit:	(2 ppm)	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)
Sulphur dioxide	7446-09-5	15 MIN ACL : 15 minute average contamin ation limit:	(5 ppm)	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

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Sulphur dioxide	7446-09-5	STEL : Short term exposure limit	13 mg/m3 (5 ppm)	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)
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Sulphur dioxide	7446-09-5	TWA : Time weighted average	5.2 mg/m3 (2 ppm)	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Color	: light yellow
Odor	: aromatic
Odor threshold	: Note: no data available
pH	: Note: no data available
Melting point/range	: Note: no data available
Boiling point/boiling range	: 63 °C at 1,013 hPa
Flash point	: 52 °F (11 °C)
Evaporation rate	: Note: no data available

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Lower explosion limit	: 5.5 %(V)
Upper explosion limit	: 26.5 %(V)
Vapor pressure	: 128 hPa at 20 °C(68 °F)
Vapor density	: Note: no data available
Density	: ca. 0.930 g/cm ³ at 20 °C
Water solubility	: Note: completely miscible
Partition coefficient: n-octanol/water	: Note: no data available
Ignition temperature	: 455 °C
Decomposition temperature	: Note: No decomposition if used as directed.
Viscosity, dynamic	: Note: no data available
Viscosity, kinematic	: Note: no data available

SECTION 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Oxidizing agents
Hazardous decomposition	: In case of fire hazardous decomposition products may be

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products
produced such as:
Carbon monoxide
Carbon dioxide (CO₂)
nitrogen oxides (NO_x)
Sulphur oxides
Hydrogen halides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity
Methanol : LD50: 5,628 mg/kg
Species: Rat

Diethanolamine : LD50: 1,100 - 2,500 mg/kg
Species: Rat, male and female
Method: OECD Test Guideline 401

1H-Imidazole
monohydriodide : LD50: > 300 mg/kg
Species: Rat
Method: OECD 423

Imidazole : LD50: 970 mg/kg
Species: Rat

Acute inhalation toxicity
Methanol : LC50: 64000 ppm
Exposure time: 4 h
Species: Rat

Acute dermal toxicity
Methanol : LD50: 15,800 mg/kg
Species: Rabbit

Diethanolamine : LD50: 12.2 g/kg
Species: Rabbit

1H-Imidazole
monohydriodide : LD50: > 2,000 mg/kg
Species: Rat
Method: OECD Test Guideline 402

Skin irritation : Species: Rabbit

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	Result: No skin irritation
Eye irritation	: Species: rabbit eye Result: Risk of serious damage to eyes.
Sensitisation Diethanolamine	: Maximisation Test Species: Guinea pig Result: Did not cause sensitisation on laboratory animals. Method: OECD Test Guideline 406
1H-Imidazole monohydriodide	: Mouse local lymph node assay Species: Mouse Result: Does not cause skin sensitisation. Method: OECD 429
Repeated dose toxicity Methanol	: Species: Rat Application Route: Inhalation Test substance: Methanol Developmental Toxicity NOAEL (maternal toxicity) 10,000 ppm NOAEL (developmental toxicity) 5,000 ppm Skeletal and visceral malformations.
Diethanolamine	: Species: Rat, male and female Application Route: Oral LOAEL (Lowest observed adverse effect level): 14 - 25 mg/kg/d Target Organs: Liver, Blood, Kidney Method: OECD Test Guideline 408 Species: Rat, male and female Application Route: Dermal LOAEL (Lowest observed adverse effect level): 32 mg/kg/d Method: OECD Test Guideline 411
1H-Imidazole monohydriodide	: Species: Rat Application Route: Ingestion Exposure time: (28 d) NOEL: 50 mg/kg/d Method: Repeated dose (28 days) toxicity (oral)

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Genotoxicity in vitro Methanol	: Note: In vitro tests did not show mutagenic effects
Diethanolamine	: Note: In vitro tests did not show mutagenic effects
1H-Imidazole monohydriodide	: Result: negative Method: Mutagenicity (Escherichia coli - reverse mutation assay)
Imidazole	: Test Method: In vitro mammalian cell gene mutation test Cell type: Chinese hamster fibroblasts Metabolic activation: with and without metabolic activation Result: negative Method: OECD Test Guideline 476
	: Test Method: Ames test Result: negative
	: Test Method: Chromosome aberration test in vitro Cell type: Chinese hamster cells Result: negative Method: OECD Test Guideline 473
	: Test Method: reverse mutation assay Cell type: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative
Genotoxicity in vivo Methanol	: Note: In vivo tests did not show mutagenic effects
Diethanolamine	: Test Method: Chromosome aberration test Species: Mouse, male and female Application Route: Dermal Method: OECD Test Guideline 474 Result: negative
Imidazole	: Test Method: Micronucleus test Species: Mouse, male and female Cell type: Bone marrow Application Route: Oral Method: OECD Test Guideline 474 Result: negative

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Teratogenicity
Imidazole

: Species: Rat Application Route: Oral

No observed adverse effect level: 60 mg/kg body weight

No observed adverse effect level: 60 mg/kg body weight

Method: OECD Test Guideline 414

Result: Embryotoxic effects and adverse effects on the offspring were detected.

SECTION 12. ECOLOGICAL INFORMATIONToxicity to fish
Methanol: LC50: 29,400 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)

Diethanolamine

: static test
LC50: 1,370 - 1,550 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)1H-Imidazole
monohydriodide: LC0: >= 100 mg/l
Exposure time: 96 h
Species: Danio rerio (zebra fish)
Method: OECD Test Guideline 203

Imidazole

: static test
LC50: 283.6 mg/l
Exposure time: 48 h
Species: Leuciscus idus (Golden orfe)

Toxicity to daphnia and other aquatic invertebrates

Methanol

: LC50: 10,000 mg/l
Exposure time: 24 h
Species: Daphnia (water flea)

Diethanolamine

: EC50: 55 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

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		EC50: 30.1 - 89.9 mg/l Exposure time: 48 h Species: Ceriodaphnia dubia (water flea)
1H-Imidazole monohydriodide	:	EC50: 1.4 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202
		EC0: 0.46 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202
Imidazole	:	static test EC50: 341.5 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: Directive 67/548/EEC, Annex V, C.2.
Toxicity to algae Diethanolamine	:	static test EC50: 9.5 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (algae)
1H-Imidazole monohydriodide	:	Biomass EC50: 8.3 mg/l Exposure time: 72 h Species: scenedesmus subspicatus Method: OECD Test Guideline 201
		Growth rate EC50: 34 mg/l Exposure time: 72 h Species: scenedesmus subspicatus Method: OECD Test Guideline 201
		Biomass NOEC: 1 mg/l Exposure time: 72 h Species: scenedesmus subspicatus Method: OECD Test Guideline 201
		Biomass NOEC: 1 mg/l

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	Exposure time: 72 h Species: scenedesmus subspicatus Method: OECD Test Guideline 201
Imidazole	: static test EC50: 133 mg/l Exposure time: 72 h Species: Desmodesmus subspicatus (green algae) Method: DIN 38412
Toxicity to bacteria Methanol	: EC50: 43,000 mg/l Exposure time: 5 min Species: Photobacterium phosphoreum EC50: 40,000 mg/l Exposure time: 15 min Species: Photobacterium phosphoreum EC50: 39,000 mg/l Exposure time: 25 min Species: Photobacterium phosphoreum
1H-Imidazole monohydriodide	: Respiration inhibition EC50: > 1,000 mg/l Exposure time: 3 h Species: activated sludge Method: OECD 209 Respiration inhibition NOEC: 320 mg/l Exposure time: 3 h Species: activated sludge Method: OECD 209
Biodegradability Imidazole	: Result: Readily biodegradable. Method: OECD Test Guideline 301A

Further information on ecology

Biochemical Oxygen Demand (BOD)
Diethanolamine : Value: 885 mg/g

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Chemical Oxygen Demand (COD)
Diethanolamine : Value: 1,352 mg/g

Additional ecological information : Do not flush into surface water or sanitary sewer system.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

TDG UN/ID No. : UN 1230
Proper shipping name : METHANOL SOLUTION
Class : 3
Packing group : II
Hazard Labels : 3 (6.1)

IATA UN/ID No. : UN 1230
Description of the goods : METHANOL SOLUTION
Class : 3
Packaging group : II
Hazard Labels : 3 (6.1)
Packing instruction (cargo aircraft) : 364
Packing instruction (passenger aircraft) : 352
Packing instruction (passenger aircraft) : Y341

IMDG UN/ID No. : UN 1230
Description of the goods : METHANOL SOLUTION
Class : 3
Packaging group : II
Hazard Labels : 3 (6.1)
EmS Number : F-E, S-D
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

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Inventories

- US. Toxic Substances Control Act : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.
- Australia. Industrial Chemical (Notification and Assessment) Act : On the inventory, or in compliance with the inventory
- China. Inventory of Existing Chemical Substances : On the inventory, or in compliance with the inventory
- Note : Note: Because of the potential specific inventory listing of components of this product line, further, more detailed information can be requested from SafetyDataSheet@Honeywell.com.

National regulatory information

- TSCA : This material must be used in compliance with the TSCA Research and Development Exemption requirements (40 CFR 720.36).
- US. EPA CERCLA Hazardous Substances (40 CFR 302) : The following component(s) of this product is/are subject to release reporting under 40 CFR 302 when release exceeds the Reportable Quantity (RQ):
- | | |
|-------------------------------|-----------|
| Reportable quantity: 100 lbs | |
| : Diethanolamine | 111-42-2 |
| : | |
| Reportable quantity: 5000 lbs | |
| : Methanol | 67-56-1 |
| : | |
| Reportable quantity: 500 lbs | |
| : Sulphur dioxide | 7446-09-5 |

WHMIS Components

- | | |
|-------------------|-----------|
| : Methanol | 67-56-1 |
| : Diethanolamine | 111-42-2 |
| : Sulphur dioxide | 7446-09-5 |

NPRI Components

- | | |
|------------|---------|
| : Methanol | 67-56-1 |
|------------|---------|

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SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 3*	3
Flammability	: 3	3
Physical Hazard	: 0	
Instability	:	0

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Previous Issue Date: 01/31/2018

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group