

HYDRANAL™ CRM Water Standard 10.0**34425-80ML**

Version 1.1

Revision Date 02/26/2020

Print Date 05/12/2023

SECTION 1. IDENTIFICATION

Product name : HYDRANAL™ CRM Water Standard 10.0

Number : 000000018681

Product Use Description : Laboratory chemicals

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

For more information call : 1-800-368-0050
+1-231-726-3171(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 : colourless

Odor : aromatic

Classification of the substance or mixture

Classification of the substance or mixture : Flammable liquids, Category 3
Skin irritation, Category 2
Serious eye damage, Category 1
Specific target organ toxicity - single exposure, Category 3,
Respiratory system, Central nervous system
Aspiration hazard, Category 1

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GHS Label elements, including precautionary statements

Symbol(s)

:



Signal word

: Danger

Hazard statements

: Flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
May cause drowsiness or dizziness.

Precautionary statements

: **Prevention:**
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.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
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.
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant

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foam for extinction.

Storage:

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

Disposal:

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

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Propylene carbonate	108-32-7	>=50.00 - <70.00 %
o-Xylene	95-47-6	>=20.00 - <30.00 %
Butan-1-ol	71-36-3	>=20.00 - <30.00 %

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 with soap and water. If skin irritation persists, call a

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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. Do NOT induce vomiting. Call a physician immediately.

Notes to physician

Most important symptoms/effects, acute and delayed : No information available.

Indication of immediate medical attention and special treatment needed, if necessary : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO2)
Dry powder

Unsuitable extinguishing media : High volume water jet

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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

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Environmental precautions : Should not be released into the environment.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material.
Pick for disposal in tightly closed containers

SECTION 7. HANDLING AND STORAGE**Handling**

Precautions for safe handling : Exhaust ventilation at the object is necessary.

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.
Take measures to prevent the build up of electrostatic charge.
Normal measures for preventive fire protection.
Vapours may form explosive mixtures with air.

Storage

Conditions for safe storage, including any incompatibilities : Keep only in the original container, tightly closed, in a well ventilated place.
Store at room temperature.
(Ambient temperature: > 0 < 35°C)
Protect from atmospheric moisture and water.

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.

Eye protection : Safety goggles

Hand protection : Protective gloves
Gloves must be inspected prior to use.
Replace when worn.

Skin and body protection : Protective suit

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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
o-Xylene	95-47-6	TWA : Time weighted average	(100 ppm)	03 2014	ACGIH:US. ACGIH Threshold Limit Values, as amended

o-Xylene	95-47-6	STEL : Short term exposure limit	(150 ppm)	03 2014	ACGIH:US. ACGIH Threshold Limit Values, as amended
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o-Xylene	95-47-6	REL : Recommended exposure limit (REL):	435 mg/m3 (100 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
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o-Xylene	95-47-6	STEL : Short term exposure limit	655 mg/m3 (150 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
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o-Xylene	95-47-6	PEL : Permissible exposure limit	435 mg/m3 (100 ppm)	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
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SAFETY DATA SHEET



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o-Xylene	95-47-6	STEL : Short term exposure limit	655 mg/m3 (150 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
o-Xylene	95-47-6	TWA : Time weighted average	435 mg/m3 (100 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Butan-1-ol	71-36-3	TWA : Time weighted average	(20 ppm)	2008	ACGIH:US. ACGIH Threshold Limit Values, as amended
Butan-1-ol	71-36-3	Ceil_Tim e : Ceiling Limit Value and Time Period (if specified) :	150 mg/m3 (50 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Butan-1-ol	71-36-3	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Butan-1-ol	71-36-3	PEL : Permissi ble exposure limit	300 mg/m3 (100 ppm)	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended

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Butan-1-ol	71-36-3	SKIN_FI NAL : Skin designati on (Final Rule Limit applies):	Can be absorbed through the skin.	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Butan-1-ol	71-36-3	Ceiling : Ceiling Limit Value:	150 mg/m3 (50 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Color	: colourless
Odor	: aromatic
Odor threshold	: Note: no data available
pH	: Note: no data available
Melting point/freezing point	: Note: no data available
Boiling point/boiling range	: 109 °C at 1,013 hPa
Flash point	: 90 °F (32 °C)
Evaporation rate	: Note: no data available
Lower explosion limit	: Note: no data available

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Upper explosion limit	: Note: no data available
Vapor pressure	: Note: no data available
Vapor density	: Note: no data available
Density	: ca. 1.000 g/cm ³ at 20 °C
Water solubility	: Note: immiscible
Solubility in other solvents	: Note: no data available
Partition coefficient: n-octanol/water	: Note: no data available
Ignition temperature	: Note: no data available
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

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air. Hazardous polymerisation does not occur.
Conditions to avoid	: Heat, flames and sparks.

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Incompatible materials : Strong oxidizing agents

SECTION 11. TOXICOLOGICAL INFORMATIONAcute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation methodAcute inhalation toxicity : Acute toxicity estimate: > 40 mg/l , vapour
Exposure time: 4 h
Method: Calculation methodAcute dermal toxicity : Acute toxicity estimate: 3,437 mg/kg
Method: Calculation methodSkin irritation
Propylene carbonate : Species: Rabbit
Result: slight irritation
Method: OECD Test Guideline 404

o-Xylene : Result: Irritating to skin.

Butan-1-ol : Species: Rabbit
Result: Moderate skin irritationEye irritation
o-Xylene : Result: Irritating to eyes.Butan-1-ol : Species: Rabbit
Result: Severe eye irritationRepeated dose toxicity
Propylene carbonate : Species: Rat, male and female
Application Route: Oral
Exposure time: (90 d)

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No observed adverse effect level: > 5000 mg/kg/d
Method: OECD 408

Species: Rat, male and female
Application Route: Inhalation
Exposure time: (90 d)
No observed adverse effect level: 100 mg/m3
Method: OECD Test Guideline 413

Butan-1-ol

: Species: Rat
Application Route: Inhalation
Exposure time: (13 Weeks)
NOAEL (No observed adverse effect level): 3000 ppm

Species: Rat
Application Route: Oral
Exposure time: (13 Weeks)
NOAEL (No observed adverse effect level): 125 mg/kg/d
LOAEL (Lowest observed adverse effect level): 500 mg/kg/d

Genotoxicity in vitro
Propylene carbonate

: Test Method: Ames test
Cell type: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative
Method: OECD Test Guideline 471

: Test Method: unscheduled DNA synthesis assay
Cell type: rat hepatocytes
Metabolic activation: without metabolic activation
Result: negative
Method: OECD Test Guideline 482

Genotoxicity in vivo
Propylene carbonate

: Test Method: Micronucleus test
Species: Mouse
Cell type: Micronucleus
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative

Butan-1-ol

: Note: In vivo tests did not show mutagenic effects

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Carcinogenicity

Propylene carbonate

: Species: Mouse, male

Application Route: Dermal

Note: Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Propylene carbonate

: Species: Rat

Application Route: Oral

Note: No toxicity to reproduction

Species: Rat

Application Route: Inhalation exposure

Note: No toxicity to reproduction

Teratogenicity

Propylene carbonate

: Species: Rat

Application Route: Oral

Note: Did not show teratogenic effects in animal experiments.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to fish

o-Xylene

: LC50: 16.9 mg/l

Exposure time: 96 h

Species: Carassius auratus (goldfish)

Butan-1-ol

: static test

LC50: 1,376 mg/l

Exposure time: 96 h

Species: Pimephales promelas (fathead minnow)

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

Butan-1-ol

: static test

EC50: 1,328 mg/l

Exposure time: 48 h

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Species: *Daphnia magna* (Water flea)
Method: OECD Test Guideline 202

Toxicity to algae
Propylene carbonate

: EC50: > 900 mg/l
Exposure time: 72 h
Species: *scenedesmus subspicatus*
Method: OECD Test Guideline 201

EC50: > 900 mg/l
Exposure time: 72 h
Species: *scenedesmus subspicatus*
Method: OECD Test Guideline 201

Butan-1-ol

: EC50: 225 mg/l
Exposure time: 96 h
Species: *Scenedesmus capricornutum* (fresh water algae)
Method: OECD Test Guideline 201

Biodegradability
Propylene carbonate

: Result: Readily biodegradable.
Method: OECD 301 B

Butan-1-ol

: Result: Readily biodegradable.
Value: > 70 %

Further information on ecology

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

DOT UN/ID No. : UN 1993
Proper shipping name : Flammable liquids, n.o.s.
(1-Butanol, Xylene)

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Class	3
Packing group	III
Hazard Labels	3

IATA	UN/ID No.	: UN 1993
	Description of the goods	: Flammable liquids, n.o.s. (1-Butanol, Xylene)
	Class	: 3
	Packaging group	: III
	Hazard Labels	: 3
	Packing instruction (cargo aircraft)	: 366
	Packing instruction (passenger aircraft)	: 355
	Packing instruction (passenger aircraft)	: Y344

IMDG	UN/ID No.	: UN 1993
	Description of the goods	: Flammable liquids, n.o.s. (1-BUTANOL, XYLENE)
	Class	: 3
	Packaging group	: III
	Hazard Labels	: 3
	EmS Number	: F-E, S-E
	Marine pollutant	: no

SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemical (Notification and Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

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Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC) : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

National regulatory information

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: 1000 lbs
: o-Xylene 95-47-6
:
Reportable quantity: 5000 lbs
: Butan-1-ol 71-36-3

SARA 302 Components : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313 Components** : The following components are subject to reporting levels established by SARA Title III, Section 313:
: o-Xylene 95-47-6
: Butan-1-ol 71-36-3**SARA 311/312 Hazards** : Fire Hazard
Acute Health Hazard
Chronic Health Hazard**CERCLA Reportable** : 4082 lbs

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Quantity

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts RTK : o-Xylene 95-47-6
: Butan-1-ol 71-36-3

New Jersey RTK : o-Xylene 95-47-6
: Butan-1-ol 71-36-3

Pennsylvania RTK : o-Xylene 95-47-6
: Butan-1-ol 71-36-3

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.

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

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