

HYDRANAL™ CompoSolver E**34734-1L**

Version 1.3

Revision Date 07/09/2020

Print Date 05/12/2023

SECTION 1. IDENTIFICATION

Product name : HYDRANAL™ CompoSolver E

Number : 000000020508

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 : yellowish

Odor : aromatic

Classification of the substance or mixture

Classification of the substance or mixture : Flammable liquids, Category 2
Eye irritation, Category 2A
Carcinogenicity, Category 2
Reproductive toxicity, Category 1B

GHS Label elements, including precautionary statements

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Symbol(s)

:



Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapour.
Causes serious eye irritation.
Suspected of causing cancer.
May damage fertility or the unborn child.

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.
Wash skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF ON SKIN (or hair): Remove/ 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.
IF exposed or concerned: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
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.

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Carcinogenicity

IARC:	2-Methylimidazole	693-98-1
	Group 2B: Possibly carcinogenic to humans	
ACGIH:	Ethanol	64-17-5
	A3: Confirmed animal carcinogen	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Ethanol	64-17-5	>=90.00 - <=100.00 %
2-Methylimidazole	693-98-1	>=1.00 - <5.00 %
Sulphur dioxide	7446-09-5	>=1.00 - <5.00 %

SECTION 4. FIRST AID MEASURES

General advice	: First aider needs to protect himself. Take off all contaminated clothing immediately. Move out of dangerous area.
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.

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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 : Remove all sources of ignition.
Ensure adequate ventilation.
Evacuate personnel to safe areas.

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

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SECTION 7. HANDLING AND STORAGE**Handling**

- Precautions for safe handling : Avoid exposure - obtain special instructions before use.
Exhaust ventilation at the object is necessary.
- Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.
The heavy vapours can overcome a considerable distance up to the source of ignition.
Take measures to prevent the build up of electrostatic charge.
Normal measures for preventive fire protection.

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.
- Advice on common storage : Do not store together with:
Oxidizing agents

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/dust.
- Engineering measures : Use with local exhaust ventilation.
- Eye protection : Safety goggles
- Hand protection : Impervious butyl rubber gloves
Gloves must be inspected prior to use.
Replace when worn.

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- 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
Ethanol	64-17-5	STEL : Short term exposure limit	(1,000 ppm)	2009	ACGIH:US. ACGIH Threshold Limit Values, as amended
Ethanol	64-17-5	REL : Recommended exposure limit (REL):	1,900 mg/m3 (1,000 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Ethanol	64-17-5	PEL : Permissible exposure limit	1,900 mg/m3 (1,000 ppm)	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Ethanol	64-17-5	TWA : Time weighted average	1,900 mg/m3 (1,000 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

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Sulphur dioxide	7446-09-5	STEL : Short term exposure limit	(0.25 ppm)	2009	ACGIH:US. ACGIH Threshold Limit Values, as amended
Sulphur dioxide	7446-09-5	STEL : Short term exposure limit	13 mg/m3 (5 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Sulphur dioxide	7446-09-5	REL : Recomm ended exposure limit (REL):	5 mg/m3 (2 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Sulphur dioxide	7446-09-5	PEL : Permissi ble exposure limit	13 mg/m3 (5 ppm)	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Sulphur dioxide	7446-09-5	STEL : Short term exposure limit	13 mg/m3 (5 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Sulphur dioxide	7446-09-5	TWA : Time weighted average	5 mg/m3 (2 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical state	: liquid
Color	: yellowish
Odor	: aromatic
Odor threshold	: Note: No data available
pH	: ca. 6
Melting point/range	: Note: No data available
Boiling point/boiling range	: 76 °C
Flash point	: 54 °F (12 °C)
Evaporation rate	: Note: No data available
Lower explosion limit	: Note: No data available
Upper explosion limit	: Note: No data available
Vapor pressure	: Note: No data available
Vapor density	: Note: No data available
Density	: 0.802 g/cm ³ at 20 °C
Water solubility	: Note: No data available
Partition coefficient: n-octanol/water	: Note: No data available

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Ignition temperature : Note: Not applicable

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 : Hazardous polymerisation does not occur.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents
Alkali metals
Ammonia
Peroxides
Zinc

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 30000 ppm, gas
Exposure time: 4 h
Method: Calculation method

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Acute dermal toxicity 2-Methylimidazole	: LD50: > 2,000 mg/kg Species: Rat, male and female Method: OECD Test Guideline 402
Skin irritation	: Result: No skin irritation
Eye irritation	: Result: Irritating to eyes.
Sensitisation 2-Methylimidazole	: Mouse local lymph node assay Species: Mouse Result: Did not cause sensitisation on laboratory animals. Method: OECD Test Guideline 429
Teratogenicity 2-Methylimidazole	: Species: Rat Application Route: Oral No observed adverse effect level: >50 mg/kg body weight No observed adverse effect level: 2 mg/kg body weight Method: OECD Test Guideline 414 Result: Embryotoxic effects and adverse effects on the offspring were detected.
Further information	: Note: No data available

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to fish Ethanol	: LC0: 8,140 mg/l Exposure time: 48 h Species: Leuciscus idus (Golden orfe) flow-through test LC50: 12,900 mg/l
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Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

LC50: 14,200 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)

2-Methylimidazole : static test
LC50: 190 mg/l
Exposure time: 96 h
Species: Leuciscus idus (Golden orfe)
Method: DIN 38412

Toxicity to daphnia and other aquatic invertebrates
Ethanol : EC50: 9,268 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

EC50: 10,800 mg/l
Exposure time: 24 h
Species: Daphnia magna (Water flea)

2-Methylimidazole : static test
EC50: 225.31 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: Directive 67/548/EEC, Annex V, C.2.

Toxicity to algae
Ethanol : LC0: 5,000 mg/l
Species: Scenedesmus quadricauda (Green algae)

2-Methylimidazole : static test
EC50: 256.3 mg/l
Exposure time: 72 h
Species: Desmodesmus subspicatus (green algae)
Method: DIN 38412

static test
EC50: 189 mg/l
Exposure time: 72 h
Species: Desmodesmus subspicatus (green algae)
Method: DIN 38412

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 Toxicity to bacteria
 Ethanol

: LC0: 6,500 mg/l
 Species: Pseudomonas putida

EC50: 35,470 mg/l
 Exposure time: 5 min
 Species: Photobacterium phosphoreum

EC50: 34,634 mg/l
 Exposure time: 30 min
 Species: Photobacterium phosphoreum

 Biodegradability
 2-Methylimidazole

: Result: Readily biodegradable.
 Value: > 60 %

Further information on ecology
SECTION 13. DISPOSAL CONSIDERATIONS

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

SECTION 14. TRANSPORT INFORMATION

DOT UN/ID No. : UN 1170
 Proper shipping name : Ethanol solution
 Class : 3
 Packing group : II
 Hazard Labels : 3

IATA UN/ID No. : UN 1170
 Description of the goods : Ethanol solution
 Class : 3
 Packaging group : II
 Hazard Labels : 3
 Packing instruction (cargo) : 364

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aircraft)
 Packing instruction : 353
 (passenger aircraft)
 Packing instruction : Y341
 (passenger aircraft)

IMDG UN/ID No. : UN 1170
 Description of the goods : Ethanol solution
 Class : 3
 Packaging group : II
 Hazard Labels : 3
 EmS Number : F-E, S-D
 Marine pollutant : no

SECTION 15. REGULATORY INFORMATION
Inventories

US. Toxic Substances : On TSCA Inventory
 Control Act

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

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

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

Korea. Toxic Chemical : On the inventory, or in compliance with the inventory
 Control Law (TCCL) List

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

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

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

National regulatory information

SARA 302 Components : The following components are subject to reporting levels established by SARA Title III, Section 302:
: Sulphur dioxide 7446-09-5

SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

California Prop. 65 :  **WARNING:** This product can expose you to chemicals, listed below, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

2-Methylimidazole 693-98-1
Sulphur dioxide 7446-09-5

Massachusetts RTK : Ethanol 64-17-5
: Sulphur dioxide 7446-09-5

New Jersey RTK : Ethanol 64-17-5
: Sulphur dioxide 7446-09-5

Pennsylvania RTK : Ethanol 64-17-5
: Sulphur dioxide 7446-09-5

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 3*	3

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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.

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Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group