HYDRANAL™-Coulomat Oil

34868-100ML

Version 0.0 Revision Date 02/05/2018 Print Date 02/05/2018

SECTION 1. IDENTIFICATION

Product name	:	HYDRANAL™-Coulomat Oil
Number	:	000000022635
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	:	colourless
Odor	:	characteristic

Classification of the substance or mixture

Classification of the substance or mixture	:	Flammable liquids, Category 2 Acute toxicity, Category 4, Oral Acute toxicity, Category 4, Inhalation Skin irritation, Category 2 Eye irritation, Category 2A Carcinogenicity, Category 2 Reproductive toxicity, Category 1B Specific target organ toxicity - single exposure, Category 1, Eyes, Nervous system, Systemic toxicity Specific target organ toxicity - single exposure, Category 3, Respiratory system, Central nervous system Specific target organ toxicity - repeated exposure, Category 1, Liver, Kidney Aspiration hazard, Category 1

GHS Label elements, including precautionary statements

Symbol(s) :

Signal word : Danger

Hazard statements : Highly flammable liquid and vapour.
Harmful if swallowed or if inhaled
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness and dizziness.
Suspected of causing cancer.
May damage fertility or the unborn child.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
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.

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.
IF exposed: Call a POISON CENTER or doctor/ physician.
Rinse mouth.
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant 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

NTP:	Chloroform	67-66-3
	Reasonably Anticipated to be a Human Carcinogen.	
IARC:	Chloroform	67-66-3

Group 2B: Possibly carcinogenic to humans

ACGIH: Chloroform 67-66-3
A3: Confirmed animal carcinogen

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Methanol	67-56-1	>=30.00 - <50.00 %
o-Xylene	95-47-6	>=20.00 - <30.00 %
Chloroform	67-66-3	>=20.00 - <30.00 %
1H-Imidazole monohydriodide	68007-08-9	>=10.00 - <20.00 %
Imidazole	288-32-4	>=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. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation : Remove 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 case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Protect unharmed eye.

Ingestion	:	Immediately give large quantities of water to drink. Do NOT induce vomiting. Call a physician immediately.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Carbon dioxide (CO2) Dry chemical Dry powder Water spray
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 Carbon dioxide (CO2) Formaldehyde Phosgene nitrogen oxides (NOx) 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	:	Evacuate personnel to safe areas. Wear personal protective equipment. Unprotected persons must be kept away. Remove all sources of ignition. 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 away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. The heavy vapours can overcome a considerable distance up to the source of ignition. Vapours may form explosive mixtures with air.

Storage

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

and after use.

Eye protection : Safety goggles

Hand protection : Impervious gloves
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
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_DES : Skin designation:	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_DES : Skin designation:	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)

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)

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)

Methanol	67-56-1	SKIN_DES : Skin designation:	Can be absorbed through the skin.	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	(250 ppm)	03 2011	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

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_DES : Skin designation:	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_DES : Skin designation:	Can be absorbed through the skin.	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Methanol	67-56-1	15 MIN ACL : 15 minute average contamination 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 contamination limit:	(200 ppm)	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Methanol	67-56-1	SKIN_DES : Skin designation:	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)

o-Xylene	95-47-6	TWA : Time weighted average	434 mg/m3 (100 ppm)	07 2009	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

o-Xylene	95-47-6	STEL : Short term exposure limit	651 mg/m3 (150 ppm)	07 2009	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

o-Xylene	95-47-6	STEL : Short term exposure limit	(150 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)

o-Xylene	95-47-6	TWA : Time weighted average	(100 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)

o-Xylene	95-47-6	TWA : Time weighted average	(100 ppm)	03 2014	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

o-Xylene	95-47-6	STEL : Short term exposure limit	(150 ppm)	03 2014	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

o-Xylene	95-47-6	STEL : Short Term Exposure Limit (STEL):	(150 ppm)	11 2010	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

o-Xylene	95-47-6	TWA : Time weighted average	(100 ppm)	11 2010	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

o-Xylene	95-47-6	8 HR ACL : 8 hour average contamination limit:	(100 ppm)	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

o-Xylene	95-47-6	15 MIN ACL : 15 minute average contamination limit:	(150 ppm)	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

o-Xylene	95-47-6	STEL : Short term exposure limit	651 mg/m3 (150 ppm)	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

o-Xylene	95-47-6	TWA : Time weighted average	434 mg/m3 (100 ppm)	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Chloroform	67-66-3	TWA : Time weighted average	49 mg/m3 (10 ppm)	10 2006	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Chloroform	67-66-3	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)

Chloroform	67-66-3	TWA : Time weighted average	(10 ppm)	03 2011	CAD MB OEL:Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Chloroform	67-66-3	TWA : Time weighted average	(10 ppm)	11 2010	CAD ON OEL:Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Chloroform	67-66-3	TWA : Time weighted average	24.4 mg/m3 (5 ppm) Exposure must be minimized.	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Chloroform	67-66-3	:	Recirculation prohibited	12 2008	OEL (QUE):Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Sulphur dioxide	7446-09-5	TWA : Time weighted average	5.2 mg/m3 (2 ppm)	10 2006	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Sulphur dioxide	7446-09-5	STEL : Short term exposure limit	13 mg/m3 (5 ppm)	10 2006	CAD AB OEL:Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

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)

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)

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 contamination 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 contamination limit:	(5 ppm)	05 2009	CAD SK OEL:Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

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)

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)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	liquid
Color	:	colourless
Odor	:	characteristic
Odor threshold	:	Note: no data available
pH	:	5 - 6
Melting point/range	:	Note: no data available
Boiling point/boiling range	:	Note: no data available
Flash point	:	46 °F (8 °C) Method: closed cup
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	:	1.042 g/cm3 at 20 °C
Water solubility	:	Note: insoluble

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

Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	Vapours may form explosive mixture with air. Hazardous polymerization does not occur.
Conditions to avoid	:	Protect from moisture. Heat, flames and sparks.
Incompatible materials	:	Zinc Strong bases Acids Oxidizing agents Acid chlorides Acid anhydrides Reducing agents Alkali metals
Hazardous decomposition products	:	In case of fire hazardous decomposition products may be produced such as: Carbon monoxide Carbon dioxide (CO2) Formaldehyde Phosgene nitrogen oxides (NOx) Sulphur oxides Hydrogen halides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity		
Methanol	:	LD50: 5,628 mg/kg Species: Rat
Chloroform	:	LD50: 908 - 1,117 mg/kg Species: Rat 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
1H-Imidazole monohydriodide	:	LD50: > 2,000 mg/kg Species: Rat Method: OECD Test Guideline 402
Skin irritation	:	Result: Irritating to skin.
Eye irritation	:	Result: Irritating to eyes.
Sensitisation		
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.
Chloroform	:	Species: Rat Application Route: Inhalation (50 ppm; 7 hours/day, 5 days/week for 6 months) Causes damage to the following organs: liver, kidneys. Species: Rat, male Application Route: Oral gavage bioassay Carcinogenicity (70 g/kg for 78 weeks) Kidney tumors Species: Mouse, both male and female Application Route: Oral gavage bioassay Carcinogenicity (127 g/kg for 92 weeks) Liver tumors Species: Rat, male Application Route: Drinking Water Study Carcinogenicity (160 mg/kg/d for 104 days) Kidney tumors Species: Rat Application Route: Inhalation Embryotoxicity at maternally toxic concentrations. Species: Rat Application Route: Inhalation Teratogenicity at maternally toxic concentrations.
1H-Imidazole	:	Species: Rat

monohydriodide		Application Route: Ingestion Exposure time: (28 d) NOEL: 50 mg/kg/d Method: Repeated dose (28 days) toxicity (oral)
Genotoxicity in vitro		
Methanol	:	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
Imidazole	:	Test Method: Micronucleus test Species: Mouse, male and female Cell type: Bone marrow Application Route: Oral Method: OECD Test Guideline 474 Result: negative

Teratogenicity

Imidazole	:	Species: RatApplication 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.
Further information Chloroform	:	Note: Contains material which may cause cancer based on animal data.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to fish Methanol	:	LC50: 29,400 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow)
o-Xylene	:	LC50: 16.9 mg/l Exposure time: 96 h Species: Carassius auratus (goldfish)
Chloroform	:	static test LC50: 43.8 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) static test LC50: 100 mg/l Exposure time: 96 h Species: Lepomis macrochirus (Bluegill sunfish)
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)
Chloroform	:	static test LC50: 28.9 mg/l Exposure time: 48 h Species: Daphnia magna (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

Chloroform	:	LC0: 185 mg/l Species: Microcystis aeruginosa (blue alge) LC0: 1,110 mg/l Species: Scenedesmus quadricauda
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
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

Chloroform : LC0: 125 mg/l
Species: Pseudomonas putida

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

Additional ecological information : The product should not be allowed to enter drains, water courses or the soil.

SECTION 13. DISPOSAL CONSIDERATIONS

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

SECTION 14. TRANSPORT INFORMATION

TDG	UN/ID No.	: UN 1992
	Proper shipping name	: FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOL, XYLENE, CHLOROFORM)
	Class	3
	Packing group	II
	Hazard Labels	3 (6.1)
IATA	UN/ID No.	: UN 1992
	Description of the goods	: FLAMMABLE LIQUID, TOXIC, N.O.S. (Methanol, Xylene, Chloroform)
	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 1992
	Description of the goods	: FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOL, XYLENE, CHLOROFORM)
	Class	: 3

Packaging group	:	II
Hazard Labels	:	3 (6.1)
EmS Number	:	F-E, S-D
Marine pollutant	:	no

IMDG Code segregation group 10 – Liquid halogenated hydrocarbons,

SECTION 15. REGULATORY INFORMATION

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.
	:	1H-Imidazole monohydriodide 68007-08-9
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

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: 10 lbs
	:	Chloroform 67-66-3
	:	
		Reportable quantity: 1000 lbs
	:	o-Xylene 95-47-6
	:	
		Reportable quantity: 5000 lbs
	:	Methanol 67-56-1
	:	
		Reportable quantity: 500 lbs
	:	Sulphur dioxide 7446-09-5

WHMIS			
Components	:	Methanol	67-56-1
	:	o-Xylene	95-47-6
	:	Chloroform	67-66-3
	:	Sulphur dioxide	7446-09-5
NPRI			
Components	:	Methanol	67-56-1
	:	Chloroform	67-66-3

SECTION 16. OTHER INFORMATION

		HMIS III	NFPA
Health hazard	:	2*	2
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