

Safety Data Sheet

Ethanol Spec IND PM 4082 200P

Version 1.4

Revision Date: 09/01/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Ethanol Spec IND PM 4082 200P

Manufacturer or supplier's details

Company : Univar Solutions USA, Inc.

Address : 3075 Highland Pkwy Suite 200
Downers Grove, IL 60515
United States of America (USA)

Emergency telephone number:
Transport North America: CHEMTREC (1-800-424-9300)
CHEMTREC INTERNATIONAL Tel # 703-527-3887

Additional Information: : Responsible Party: Product Compliance Department
E-mail: SDSNA@univarsolutions.com
SDS Requests: 1-855-429-2661
Website: www.univarsolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2

Eye irritation : Category 2A

Specific target organ toxicity - single exposure : Category 2 (Eyes, Central nervous system)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H371 May cause damage to organs (Eyes, Central nervous system).

Precautionary statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ eye protection/ face protection.

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Response:

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.

P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor.

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

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

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

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical name	Weight percent
64-17-5	Ethanol	70 - 90
67-63-0	Isopropyl alcohol	10 - 20
67-56-1	Methanol	3 - 5
108-10-1	Methyl isobutyl ketone	1 - 5

Any Concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.

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Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon oxides
formaldehyde
toxic fumes
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

- Advice on protection against : Do not spray on a naked flame or any incandescent material.

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fire and explosion	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.
Advice on safe handling	: Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	: No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
64-17-5	Ethanol	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m ³	OSHA P0
		STEL	1,000 ppm	ACGIH
		PEL	1,000 ppm 1,900 mg/m ³	CAL PEL
67-63-0	Isopropyl alcohol	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m ³	NIOSH REL
		ST	500 ppm 1,225 mg/m ³	NIOSH REL
		TWA	400 ppm 980 mg/m ³	OSHA Z-1
		TWA	400 ppm 980 mg/m ³	OSHA P0
		STEL	500 ppm	OSHA P0

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			1,225 mg/m3	
67-56-1	Methanol	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m3	NIOSH REL
		ST	250 ppm 325 mg/m3	NIOSH REL
		TWA	200 ppm 260 mg/m3	OSHA Z-1
		STEL	250 ppm 325 mg/m3	OSHA P0
		TWA	200 ppm 260 mg/m3	OSHA P0
108-10-1	Methyl isobutyl ketone	TWA	20 ppm	ACGIH
		STEL	75 ppm	ACGIH
		TWA	50 ppm 205 mg/m3	NIOSH REL
		ST	75 ppm 300 mg/m3	NIOSH REL
		TWA	100 ppm 410 mg/m3	OSHA Z-1
		TWA	50 ppm 205 mg/m3	OSHA P0
		STEL	75 ppm 300 mg/m3	OSHA P0

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Avoid contact with skin, eyes and clothing.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and immediately after handling the product.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: Clear, Colorless
Odour	: mild
Odour Threshold	: No data available
pH	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash point	: 13 °C (55 °F)
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: 1.6(Air = 1.0)
Relative density	: 0.79 @ 20 °C (68 °F) Reference substance: (water = 1)
Density	: No data available
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No hazards to be specially mentioned.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Acids Aldehydes Alkali metals aluminum Ammonia Bases halogens Oxidizing agents Reducing agents Peroxides

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SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate: 2,222 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Components:**67-56-1:**

Acute oral toxicity : Assessment: The component/mixture is toxic after single ingestion.

Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term inhalation.
Remarks: Supporting toxicological evidence is limited for this classification. This harmonized classification will replace the indicated classification due to industry leaders and the EU Harmonized Classification (Annex VII).

Acute dermal toxicity : Assessment: The component/mixture is toxic after single contact with skin.

108-10-1:Acute inhalation toxicity : LC50 (Rat): 11.6 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The component/mixture is moderately toxic after short term inhalation.**Skin corrosion/irritation****Components:****67-63-0:**Species: Rabbit
Result: Irritating to skin.**Serious eye damage/eye irritation****Components:****64-17-5:**Species: Rabbit
Result: Irritating to eyes.

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67-63-0:Species: Rabbit
Result: Irritating to eyes.**108-10-1:**Species: Rabbit
Result: Irritating to eyes.**Carcinogenicity****IARC**

Group 2B: Possibly carcinogenic to humans

108-10-1

Methyl isobutyl ketone

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

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.

STOT - single exposure**Components:****67-63-0:**

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

67-56-1:

Target Organs: Eyes, Central nervous system

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

108-10-1:

Target Organs: Respiratory system

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Further information**Product:**

Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

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Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-909-4897

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION**DOT (Department of Transportation):**

UN1170, Ethanol solutions, 3, II

IATA (International Air Transport Association):

UN1170, Ethanol solution, 3, II

IMDG (International Maritime Dangerous Goods):

UN1170, ETHANOL SOLUTION, 3, II, Flash Point:13 °C(55 °F)

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : B2: Flammable liquid
D2A: Very Toxic Material Causing Other Toxic Effects
D2B: Toxic Material Causing Other Toxic Effects

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EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Methanol	67-56-1	5000	*
Methyl isobutyl ketone	108-10-1	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
 Serious eye damage or eye irritation
 Specific target organ toxicity (single or repeated exposure)

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

67-63-0	Isopropyl alcohol
67-56-1	Methanol
108-10-1	Methyl isobutyl ketone

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

67-56-1	Methanol
108-10-1	Methyl isobutyl ketone

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCOMI Intermediate or Final VOC's (40 CFR 60.489):

64-17-5	Ethanol
67-63-0	Isopropyl alcohol
67-56-1	Methanol
108-10-1	Methyl isobutyl ketone

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

75-07-0	Acetaldehyde
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The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

75-07-0	Acetaldehyde
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This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

64-17-5	Ethanol
67-63-0	Isopropyl alcohol
67-56-1	Methanol
108-10-1	Methyl isobutyl ketone
75-07-0	Acetaldehyde

Pennsylvania Right To Know

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64-17-5	Ethanol
67-63-0	Isopropyl alcohol
67-56-1	Methanol
108-10-1	Methyl isobutyl ketone
75-07-0	Acetaldehyde

California Prop 65

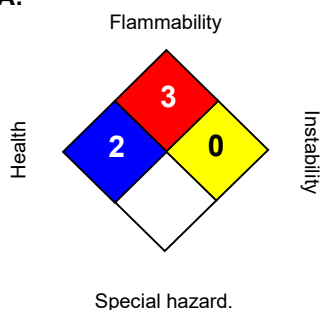
⚠ WARNING: This product can expose you to chemicals including Methyl isobutyl ketone, Acetaldehyde, which is/are known to the State of California to cause cancer, and Methanol, Methyl isobutyl ketone, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PHIL	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 =Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the

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results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

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Legacy SDS: : R0019753, 140000001056

Material number:

16057166, 16057165, 16061175, 542252, 722942, 117550, 145292, 160415, 603260, 145702, 116596, 159603, 116911, 146344, 548526, 130809, 145390

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		

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