

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Ethanol Spec Ind PM 4217 200 P
Product Use Description : Solvent.

Manufacturer or supplier's details

Company : Nexeo Solutions LLC
Address : 3 Waterway Square Place Suite 1000
 Woodlands, Tx. 77380
 United States of America

Emergency telephone number:

Health North America: 1-855-NEXEO4U (1-855-639-3648)
 Health International: 1-855-NEXEO4U (1-855-639-3648)
 Transport North America: CHEMTREC 800.424.9300

Additional Information: : Responsible Party: Product Safety Group
 E-Mail: msds@nexeosolutions.com
 SDS Requests: 1-855-429-2661
 SDS Requests Fax: 1-281-500-2370
 Website: www.nexeosolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2
 Eye irritation : Category 2A
 Specific target organ toxicity - single exposure : Category 1 (Eyes, Central nervous system)
 Specific target organ toxicity - single exposure : Category 3 (Respiratory system, Central nervous system)

GHS Label element

Hazard pictograms : 

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

H336 May cause drowsiness or dizziness.
H370 Causes damage to organs (Eyes, Central nervous system).

Precautionary statements : **Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.

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 for extinction.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

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.

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

Potential Health Effects

Carcinogenicity:

IARC

Group 2B: Possibly carcinogenic to humans

108-10-1

Methyl isobutyl ketone

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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.

Emergency Overview

Physical state	liquid
Colour	colourless
Odour	alcohol-like
Hazard Summary	No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical Name	Concentration (%)
64-17-5	Ethanol	70 - 90
67-56-1	Methanol	1 - 5
108-10-1	Methyl isobutyl ketone	1 - 5

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
 Show this safety data sheet to the doctor in attendance.
 Do not leave the victim unattended.

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

If inhaled	: If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	: Flush eyes with water as a precaution. 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. 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. Do not induce vomiting without medical advice.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO ₂) Dry chemical Water spray
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	: Use a water spray to cool fully closed containers.
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.

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

Special protective equipment for firefighters : Wear self-contained breathing apparatus for fire-fighting if necessary.
Use personal protective equipment.

NFPA Flammable and Combustible Liquids Classification:

Flammable Liquid Class IB

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : 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 safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
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 re-

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

sealed 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
67-56-1	Methanol	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m ³	NIOSH REL
		ST	250 ppm 325 mg/m ³	NIOSH REL
		TWA	200 ppm 260 mg/m ³	OSHA Z-1
		STEL	250 ppm 325 mg/m ³	OSHA P0
		TWA	200 ppm 260 mg/m ³	OSHA P0
108-10-1	Methyl isobutyl ketone	TWA	20 ppm	ACGIH
		STEL	75 ppm	ACGIH
		TWA	50 ppm 205 mg/m ³	NIOSH REL
		ST	75 ppm 300 mg/m ³	NIOSH REL
		TWA	100 ppm 410 mg/m ³	OSHA Z-1
		TWA	50 ppm 205 mg/m ³	OSHA P0
		STEL	75 ppm 300 mg/m ³	OSHA P0

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI
Methyl isobutyl ketone	108-10-1	MIBK	In urine	End of shift (As soon as possible after exposure ceases)	1 mg/l	ACGIH BEI

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
In the case of vapour formation use a respirator with an approved filter.
- 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
- 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 : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

Appearance	: liquid
Colour	: colourless
Odour	: alcohol-like
Odour Threshold	: No data available
pH	: No data available
Freezing Point	: No data available
Boiling Point (Boiling point/boiling range)	: 76.5 °C (169.7 °F) (1013 hPa)
Flash point	: 13 °C (55 °F)
Evaporation rate	: 1.9
Flammability (solid, gas)	: No data available
Burning rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: 1.5(Air = 1.0)
Relative density	: No data available
Density	: No data available
Bulk 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

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

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	: Extremes of temperature and direct sunlight. Heat, flames and sparks. Exposure to air or moisture over prolonged periods.
Incompatible materials	: Acids Aldehydes Alkali metals aluminum Amines Ammonia Bases Copper Copper alloys halogens inorganic materials Lead Oxidizing agents Peroxides sodium Strong bases Strong reducing agents Zinc

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	: Acute toxicity estimate : 2,394 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 40 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

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

Components:

64-17-5:

Acute oral toxicity : LD50 (rat): 7,060 mg/kg

Acute inhalation toxicity : LC50 (rat): 124.7 mg/l

Acute dermal toxicity : Remarks: No data available

67-56-1:

Acute oral toxicity : LD50 (rat): 100 mg/kg
Assessment: The component/mixture is toxic after single ingestion.

Acute inhalation toxicity : LC50 (rat): 5 mg/l
Assessment: The component/mixture is toxic after short term inhalation.

Acute dermal toxicity : LD50 (rabbit): 300 mg/kg
Assessment: The component/mixture is toxic after single contact with skin.

108-10-1:

Acute oral toxicity : LD50 (rat): 2,080 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (rat): 10 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Components:

64-17-5:

Species: rabbit
Result: No skin irritation

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

67-56-1:

Species: rabbit
Result: No skin irritation

108-10-1:

Species: rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: yes

Serious eye damage/eye irritation

Product:

Result: Irritating to eyes.

Components:

64-17-5:

Species: rabbit
Result: Irritating to eyes.

67-56-1:

Species: rabbit
Result: No eye irritation

108-10-1:

Species: rabbit
Result: Irritating to eyes.
Method: OECD Test Guideline 405
GLP: yes

Respiratory or skin sensitisation

Components:

64-17-5:

Test Type: lymph node assay
Species: mouse
Method: OECD Test Guideline 429
GLP: No data available
Remarks: Did not cause sensitisation on laboratory animals.

67-56-1:

Test Type: Maximisation Test (GPMT)
Species: guinea pig
Method: OECD Test Guideline 406
Result: Did not cause sensitisation on laboratory animals.

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

108-10-1:

Test Type: Maximisation Test (GPMT)

Species: guinea pig

Method: OECD Test Guideline 406

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Product:

Germ cell mutagenicity-
Assessment : mutagenicity classification is not possible

Components:

64-17-5:

Genotoxicity in vitro : Test Type: Mammalian cell gene mutation assay
Test species: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: No data available

Genotoxicity in vivo : Test Type: Dominant lethal assay
Test species: mouse (male)
Application Route: Oral
Dose: 10 or 40% ethanol in water
Method: OECD Test Guideline 478
Result: negative
GLP: No data available

Germ cell mutagenicity-
Assessment : Mutagenicity classification not possible from current data

67-56-1:

Genotoxicity in vitro : Test Type: DNA damage and/or repair
Metabolic activation: with and without metabolic activation
Result: Ambiguous

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Test species: mouse (male and female)
Cell type: Bone marrow
Application Route: Intraperitoneal
Exposure time: Single
Dose: 0, 1920, 3200, 4480 mg/kg
Result: negative

Germ cell mutagenicity-
Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

108-10-1:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Test species: mouse
Cell type: Bone marrow
Application Route: Intraperitoneal
Exposure time: 12 - 48 h
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Germ cell mutagenicity-Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Product:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Components:

64-17-5:

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

67-56-1:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

108-10-1:

Species: rat, (male and female)
Application Route: inhalation (vapour)
Exposure time: 2 yrs
Dose: 0, 450, 900, 1800 ppm
Frequency of Treatment: 6 h/d, 5 d/wk
NOAEL: 450 ppm

Method: OECD Test Guideline 451
Result: Evidence of renal carcinogenesis that is not relevant to humans
GLP: yes

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

essment

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : No toxicity to reproduction

Components:

64-17-5:

Effects on fertility : Test Type: Two-generation study
Species: mouse, male and female
Application Route: oral
Dose: 5, 10 and 15% v/v in water
General Toxicity - Parent: NOAEL: 15 % diet
General Toxicity F1: NOAEL: 10 % diet
Symptoms: reduced litter size Reduced sperm motility in F1 generation
Method: OECD Test Guideline 416
GLP: No data available

Effects on foetal development : Species: rat
Application Route: Inhalation
Dose: 10,000, 16,000 or 20,000 ppm
General Toxicity Maternal: NOAEL: 16,000 ppm
Teratogenicity: NOAEL: > 20,000 ppm
Symptoms: No malformations were observed.
Method: OECD Test Guideline 414
GLP: No data available

Reproductive toxicity - Assessment : Fertility classification not possible from current data.
Embryotoxicity classification not possible from current data.

67-56-1:

Effects on fertility : Test Type: Two-generation study
Species: rat, male and female
Application Route: Inhalation
Dose: 0, 0.013, 0.13, 1.3 mg/L
Duration of Single Treatment: 20 h
General Toxicity - Parent: NOAEC: 1.3 mg/l
General Toxicity F1: NOAEC: 0.13 mg/l
Fertility: NOAEC: 1.3 mg/l
Symptoms: Effects on postnatal development.
Result: Animal testing did not show any effects on fertility.

Reproductive toxicity - Assessment : Fertility classification not possible from current data.
Embryotoxicity classification not possible from current

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

data.

108-10-1:

Effects on fertility

: Test Type: Two-generation study
Species: rat, male and female
Application Route: inhalation (vapour)
Dose: 0, 500, 1000, 2000 ppm
Duration of Single Treatment: 6 h
Frequency of Treatment: 7 days/week
General Toxicity - Parent: NOAEC: 1,000 ppm
General Toxicity F1: NOAEC: 1,000 ppm
Fertility: NOAEC: 2,000 ppm
Symptoms: Maternal effects. sedation
Method: OECD Test Guideline 416
Result: Animal testing did not show any effects on fertility.

Effects on foetal development

: Species: rat
Application Route: inhalation (vapour)
Dose: 0, 300, 1000, 3000 ppm
Duration of Single Treatment: 10 d
Frequency of Treatment: 6 hr/day
General Toxicity Maternal: NOAEC: 1,000 ppm
Teratogenicity: NOAEC: 3,000 ppm
Symptoms: Maternal toxicity, Specific developmental abnormalities., Reduced body weight, Reduced number of viable fetuses.
Method: OECD Test Guideline 414
Result: No teratogenic effects.
GLP: yes

Reproductive toxicity - Assessment

: No evidence of adverse effects on sexual function and fertility, and on development, based on animal experiments.

STOT - single exposure

Product: No data available

Components:

64-17-5:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

Inhalation	Respiratory system	May cause respiratory irritation., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.	
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67-56-1:

Exposure routes:	Target Organs:	Assessment:	Remarks:
	Eyes, Central nervous system	Causes damage to organs., The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.	

108-10-1:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Respiratory Tract	May cause respiratory irritation., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.	

STOT - repeated exposure

Product: No data available

Components:

64-17-5: No data available

67-56-1: No data available

108-10-1: No data available

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

Repeated dose toxicity

Components:

64-17-5:

Species: rat, male and female
NOAEL: 10 ml/kg
Application Route: Oral
Exposure time: 7 or 14 wk
Number of exposures: 2 times/d, 7 d/wk
Dose: 5, 10, 20ml/kg of 16.25% etoh
Method: OECD Test Guideline 408
GLP: yes

67-56-1:

Species: mouse, male and female
NOAEL: 1.3 mg/l
Application Route: Inhalation
Exposure time: 12 mths
Number of exposures: Continuous
Dose: 0, 0.013, 0.13, 1.3 mg/L

108-10-1:

Species: rat, male and female
NOAEL: 250 mg/kg
Application Route: Oral
Exposure time: 13 wks
Number of exposures: 7 d/wk
Dose: 0, 50, 250, 1000 mg/kg bw/day
Method: OECD Test Guideline 408
GLP: yes
Symptoms: Kidney disorders
Remarks: male rat hydrocarbon nephropathy not relevant to humans

Aspiration toxicity

Product:

No aspiration toxicity classification

Components:

64-17-5:

No aspiration toxicity classification

108-10-1:

No aspiration toxicity classification

Further information

Product:

Remarks: Solvents may degrease the skin.

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

64-17-5:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)):
15,300 mg/l
Exposure time: 96 h
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Ceriodaphnia dubia): 5,012 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae : EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: No data available

67-56-1:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l
Exposure time: 96 h
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae : EC50 (Scenedesmus capricornutum (fresh water algae)): 22,000 mg/l
End point: Growth rate
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 201

Toxicity to bacteria : IC50 (activated sludge): > 1,000 mg/l
End point: Growth rate
Exposure time: 3 h
Test Type: Static
Method: OECD Test Guideline 209

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

108-10-1:

- Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 179 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 200 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 400 mg/l
End point: Growth rate
Exposure time: 96 h
Test Type: static test
- Ecotoxicology Assessment
Acute aquatic toxicity : This product has no known ecotoxicological effects.
- Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Persistence and degradability

Product:

- Biodegradability : Remarks: No data available

Components:

64-17-5:

- Biodegradability : Result: Readily biodegradable.

67-56-1:

- Biodegradability : aerobic
Result: Readily biodegradable.
Biodegradation: 72 %
Remarks: Readily biodegradable

- Biochemical Oxygen Demand (BOD) : 600 - 1,120 mg/g

- Chemical Oxygen Demand (COD) : 1,420 mg/g

- BOD/COD : BOD: 600 - 1120 COD: 1420

- Stability in water : Hydrolysis: 91 % at 19 °C (72 h)

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

Remarks: Hydrolyses on contact with water.
Hydrolyses readily.

108-10-1:

Biodegradability : Inoculum: activated sludge
Biodegradation: 83 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Readily biodegradable

Biochemical Oxygen Demand (BOD) : 1,940 mg/g

Chemical Oxygen Demand (COD) : 2,160 mg/g

Theoretical Oxygen Demand (ThOD) : 0.00272 mg/g

Bioaccumulative potential

Components:

64-17-5:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

67-56-1:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 1.0
Exposure time: 72 d
Temperature: 20 °C
Concentration: 5 mg/l
Remarks: This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

Partition coefficient: n-octanol/water : log Pow: -0.77

108-10-1:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : Pow: 24
log Pow: Calculated 1.9

Mobility in soil

Components:

108-10-1:

Stability in soil : Remarks: Not expected to adsorb on soil.

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

Other adverse effects

No data available

Product:

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 NEXEO's Environmental Services Group at 800-637-7922.

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

IATA (International Air Transport Association): UN1170, Ethanol solution, 3, II, Flash Point: 13 °C(55 °F)

IMDG (International Maritime Dangerous Goods): UN1170, ETHANOL SOLUTION, 3, II

DOT (Department of Transportation): UN1170, Ethanol solutions, 3, II

SECTION 15. REGULATORY INFORMATION

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

OSHA Hazards : Flammable liquid, Toxic by ingestion, Toxic by skin absorption, Moderate eye irritant, Moderate respiratory irritant

WHMIS Classification : B2: Flammable liquid
 D1B: Toxic Material Causing Immediate and Serious Toxic Effects
 D2A: Very Toxic Material Causing Other Toxic Effects
 D2B: Toxic Material Causing Other Toxic Effects

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	*

*: 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 : Fire Hazard
 Chronic Health Hazard
 Acute Health Hazard

SARA 302 : 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:

67-56-1	Methanol	4.1254 %
108-10-1	Methyl isobutyl ketone	1.062 %

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	4.1254 %
108-10-1	Methyl isobutyl ketone	1.062 %
75-07-0	Acetaldehyde	0.0773 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

75-07-0	Acetaldehyde	0.0773 %
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The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

64-17-5	Ethanol	81.8215 %
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Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

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67-56-1	Methanol	4.1254 %
108-10-1	Methyl isobutyl ketone	1.062 %
75-07-0	Acetaldehyde	0.0773 %

Clean Water Act

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

75-07-0	Acetaldehyde	0.0773 %
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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	0.0773 %
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This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

64-17-5	Ethanol	70 - 90 %
67-56-1	Methanol	1 - 5 %
108-10-1	Methyl isobutyl ketone	1 - 5 %
75-07-0	Acetaldehyde	0 - 0.1 %

Pennsylvania Right To Know

64-17-5	Ethanol	70 - 90 %
67-56-1	Methanol	1 - 5 %
108-10-1	Methyl isobutyl ketone	1 - 5 %
75-07-0	Acetaldehyde	0 - 0.1 %

New Jersey Right To Know

64-17-5	Ethanol	70 - 90 %
67-56-1	Methanol	1 - 5 %
108-10-1	Methyl isobutyl ketone	1 - 5 %

California Prop 65

108-10-1	Methyl isobutyl ketone	WARNING! This product contains a chemical known to the State of California to cause cancer.
75-07-0	Acetaldehyde	WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
67-56-1	Methanol	

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

United States TSCA Inventory	:	y (positive listing) (On TSCA Inventory)
Canadian Domestic Substances List (DSL)	:	y (positive listing) (All components of)

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

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		this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Korea. Korean Existing Chemicals Inventory (KECI)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
China. Inventory of Existing Chemical Substances in China (IECSC)	:	y (positive listing) (On the inventory, or in compliance with the inventory)

Safety Data Sheet

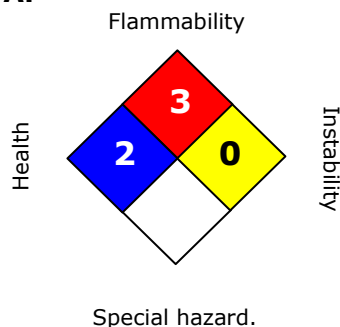
Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

SECTION 16. OTHER INFORMATION **Further 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 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 MSDS has been prepared by NEXEO™ Solutions EHS Product Safety Department (1-855-429-2661) MSDS@nexeosolutions.com.

Legacy MSDS: R0126197

Material number:

747322, 554077, 554076, 547284, 546953, 145393, 117737, 160741, 98875, 144605

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	PEL	Permissible Exposure Limit

Safety Data Sheet

Ethanol Spec Ind PM 4217 200 P

Version 1.0

Revision Date: 05/19/2015

	Chemicals Association		
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%