ARDEX LABS.

Safety Data Sheet
Lacquer Thinner

SECTION 1: Identification

Product identifier

Product name	Lacquer Thinner
Product number	8220

Supplier's details

Name	Ardex Labs.
Address	2050 Byberry Rd Philadelphia, PA 19116 United States of America
Telephone	2156980500
email	info@ardexlabs.com

Emergency phone number(s)

800-424-9300
CHEMTREC – TOLL FREE 24 HOUR EMERGENCY TELEPHONE NUMBER

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with OSHA (29 CFR 1910.1200)

- Acute toxicity, dermal (chapter 3.1), Cat. 4
- Acute toxicity, inhalation (chapter 3.1), Cat. 4
- Acute toxicity, oral (chapter 3.1), Cat. 4
- Aspiration hazard (chapter 3.10), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 2A
- Flammable liquids (chapter 2.6), Cat. 1
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 1
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3
- Toxic to reproduction (chapter 3.7), Cat. 2
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 1

GHS label elements, including precautionary statements

Pictogram

Signal word	**Danger**
Hazard statement(s)	
H224	Extremely flammable liquid and vapor
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs (Eyes, Central nervous system)
H372	Causes damage to organs through prolonged or repeated exposure (Auditory system, Eyes)
Precautionary statement(s)	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands and exposed 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/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell,
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

P370+P378	In case of fire: Use Use dry sand, dry chemical or alcohol-resistant foam to extinguish to extinguish.
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.
P501	Dispose of contents/container to local, state, and federal regulations

Other hazards which do not result in classification

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
TOLUENE (CAS no.: 108-88-3; EC no.: 203-625-9; Index no.: 601-021-00-3)	**65 %**
CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 2; Toxic to reproduction (chapter 3.7), Cat. 2; Aspiration hazard (chapter 3.10), Cat. 1; Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 2; Skin corrosion/irritation (chapter 3.2), Cat. 2; Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3. HAZARDS: H225 - Highly flammable liquid and vapor; H304 - May be fatal if swallowed and enters airways; H315 - Causes skin irritation; H336 - May cause drowsiness or dizziness; H361d - Suspected of damaging the unborn child; H373 - May cause damage to organs through prolonged or repeated exposure.	
Methanol (CAS no.: 67-56-1; EC no.: 200-659-6; Index no.: 603-001-00-X)	**40 %**
CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 2; Acute toxicity (chapter 3.1), Cat. 3; Specific target organ toxicity, single exposure (chapter 3.8), Cat. 1. HAZARDS: H225 - Highly flammable liquid and vapor; H301 - Toxic if swallowed; H311 - Toxic in contact with skin; H331 - Toxic if inhaled; H370 - Causes damage to organs.	
Naphtha (pet), hydrotreated lt AND/OR	
Heptane, branched, cyclic and linear	
AND/OR Solvent naphtha (pet), lt aliph.	
64742-49-0 /	
426260-76-6 /	
64742-89-8	**35 %**
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Heptane (CAS no.: 142-82-5; EC no.: 205-563-8; Index no.: 601-008-00-2)	**30 %**
CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 2; Aspiration hazard (chapter 3.10), Cat. 1; Skin corrosion/irritation (chapter 3.2), Cat. 2; Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3; Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 1; Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 1. HAZARDS: H225 - Highly flammable liquid and vapor; H304 - May be fatal if swallowed and enters airways; H315 - Causes skin irritation; H336 - May cause drowsiness or dizziness; H400 - Very toxic to aquatic life; H410 - Very toxic to aquatic life with long lasting effects.	
ACETONE (CAS no.: 67-64-1; EC no.: 200-662-2; Index no.: 606-001-00-8)	**30 %**
CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 2; Eye damage/irritation (chapter 3.3), Cat. 2; Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3. HAZARDS: H225 - Highly flammable liquid and vapor; H319 - Causes serious eye irritation; H336 - May cause drowsiness or dizziness.	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.
If inhaled	Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

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. Do NOT induce vomiting. 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.

Personal protective equipment for first-aid responders

See Section 8 for exposure and PPE recomendations

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

Indication of immediate medical attention and special treatment needed, if necessary
Symptons may be delayed.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable extinguishing media: Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical

Unsuitable extinguishing media:
High volume water jet.

Specific hazards arising from the chemical
Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

Do not allow run-off from fire fighting to enter drains or water courses.

Special protective actions for fire-fighters
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

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.

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 noncombustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling
Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharges

Conditions for safe storage, including any incompatibilities
Store locked up. Store in a well-ventilated place. Store in a cool place. No smoking.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: (not specified)
Naphtha (pet), hydrotreated lt AND/OR Heptane, branched, cyclic and linear AND/OR Solvent naphtha (pet), lt aliph.
64742-49-0 / 426260-76-6 / 64742-89-8
ACGIH: 400ppm TWA

CAS: 108-88-3
Toluene

Cal/OSHA: See Annotated Z-2 PEL inhalation; NIOSH: See Annotated Z-2 REL inhalation; OSHA: See Annotated Z-2 mg/m3 PEL inhalation

CAS: 142-82-5
Heptane
NIOSH (USA): 85 ppm, (ST) 440 ppm [15-min] REL inhalation; OSHA (USA): 400 ppm, (ST) 500 ppm PEL inhalation

CAS: 67-56-1
Methyl alcohol
Cal/OSHA: 200 ppm, (ST) 250 ppm, (C) 1000 ppm PEL inhalation; NIOSH: 200 ppm, (ST) 250 ppm REL inhalation; OSHA: 260 mg/m3 PEL inhalation; :; ACGIH: 200 ppm PEL-TWA; 250 ppm STEL; NIOSH: 200 ppm, 325 mg/m3 PEL-TWA; OSHA: 200 ppm, 260 mg/m3 PEL-TWA

CAS: 67-64-1
Acetone
Cal/OSHA: 500 ppm, (ST) 750 ppm, (C) 3000 ppm PEL inhalation; NIOSH: 250 ppm REL inhalation; OSHA: 2400 mg/m3 PEL inhalation

Appropriate engineering controls
Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof ventilation equipment.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Wear safety glasses with side shields (or goggles).

Body protection
Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. When using do not smoke. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

Respiratory protection
In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Liquid
Odor	No data available.
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	-20F (-4F)
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Vapor pressure	No data available.

Vapor density	No data available.
Relative density	0.791 g/cm3 @ 20 °C (68 °F)
Solubility(ies)	
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

Other safety information
No data available.

SECTION 10: Stability and reactivity

Reactivity
No data available.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No data available.

Conditions to avoid
Heat, sparks, flames
Extreme heat, direct sunlight

Incompatible materials
Bases
halogens
Oxidizing agents
Reducing agents

Hazardous decomposition products
No data available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Acute oral toxicity:
Acute toxicity estimate : 396.79 mg/kg
Method: Calculation method

Acute inhalation toxicity:
Acute toxicity estimate : 12 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity:
Acute toxicity estimate : 1,200 mg/kg

Method: Calculation method

108-88-3:
Acute oral toxicity
:
LD50 (Rat, male): > 5,580 mg/kg
Acute inhalation toxicity
:
LC50 (Rat, male and female): 28.1 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Acute dermal toxicity
:
LD50 (Rabbit): > 5,000 mg/kg
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.
64742-49-0 / 426260-76-6 / 64742-89-8:
Acute oral toxicity
:
LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes
Acute inhalation toxicity : LC50 (Rat, male and female): > 73.5 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Remarks: Information given is based on data obtained from similar substances.
Acute dermal toxicity
:
LD50 (Rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

142-82-5:
Acute oral toxicity
:
LD50 (Rat, male and female): 5,000 mg/kg
Method: OECD Test Guideline 401

Symptoms: Salivation
GLP: yes
Remarks: Information given is based on data obtained from similar substances.
Acute inhalation toxicity
:
LC50 (Rat, male and female): 73.5 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Acute dermal toxicity
:
LD50 (Rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Remarks: Information given is based on data obtained from similar substances.
67-64-1:
Acute oral toxicity
:
LD50 (Rat): 5,800 mg/kg
Acute inhalation toxicity
:
LC50 (Rat): 76.0 mg/l
Exposure time: 4 h
Acute dermal toxicity
:
LD50 : > 7,426 mg/kg

Skin corrosion/irritation
108-88-3:
Species: Rabbit
Exposure time: 4 h
Result: Irritating to skin.
67-56-1:
Species: Rabbit
Result: No skin irritation
64742-49-0 / 426260-76-6 / 64742-89-8:
Species: Rabbit
Exposure time: 24 h
Method: OECD Test Guideline 404
Result: Irritating to skin.
GLP: yes
Remarks: Information given is based on data obtained from similar substances.
142-82-5:
Species: Rabbit
Exposure time: 24 h
Method: OECD Test Guideline 404
Result: Irritating to skin.
GLP: yes
Remarks: Based on a similar product formulation.
67-64-1:
Species: Rabbit
Exposure time: 24 h

Method: In vivo
Result: Mild skin irritation

Serious eye damage/irritation

Components:
108-88-3:
Species: Rabbit
Result: Irritating to eyes.
Method: OECD Test Guideline 405
67-56-1:
Species: Rabbit
Result: No eye irritation
64742-49-0 / 426260-76-6 / 64742-89-8:
Result: No eye irritation
142-82-5:
Remarks: No data available
67-64-1:
Species: Rabbit
Result: Irritating to eyes.
Exposure time: 24 h

Respiratory or skin sensitization
Result: Did not cause sensitisation on laboratory animals.
GLP: yes
67-56-1:
Test Type: Maximisation Test (GPMT)
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Did not cause sensitisation on laboratory animals.
64742-49-0 / 426260-76-6 / 64742-89-8:
Test Type: Maximization test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Did not cause sensitisation on laboratory animals.
Remarks: Based on a similar product formulation.
142-82-5:
Test Type: Maximization test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
Remarks: Based on a similar product formulation.
67-64-1:
Test Type: Maximization test
Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity
108-88-3:
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
Genotoxicity in vivo
:
Test Type: Dominant lethal assay
Test species: Mouse (male)
Application Route: inhalation (vapour)
Exposure time: 6 h/d, 5 d/wk for 8 wks
Dose: 0, 100, 400 ppm
Method: OECD Test Guideline 478
Result: negative
Germ cell mutagenicity-
Assessment
:
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

: Test Type: Chromosome aberration test in vitro
Test species: Chinese hamster ovary (CHO)
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
Genotoxicity in vivo
:
Test Type: In vivo micronucleus test
Test species: Mouse
Application Route: Oral
Exposure time: 13 wk
Dose: 5,000, 10,000, 20,000 ppm
Result: negative
Germ cell mutagenicity-
Assessment
:
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity
108-88-3:
Species: Rat, (male and female)
Application Route: inhalation (vapour)
Exposure time: 103 wks
Dose: 0, 600, 1200 ppm
Frequency of Treatment: 6.5 h/d, 5 d/wk
NOAEL: No observed adverse effect level: 1,200 ppm
Method: OECD Test Guideline 453
Result: did not display carcinogenic properties
Symptoms: Erosion of nasal epithelium
GLP: yes
Carcinogenicity - Assessment
:
Not classifiable as a human carcinogen.
67-56-1:
Carcinogenicity - Assessment

:
Not classifiable as a human carcinogen.
64742-49-0 / 426260-76-6 / 64742-89-8:
Carcinogenicity - Assessment
:
Not classifiable as a human carcinogen.
142-82-5:
Remarks: This information is not available.
Carcinogenicity - Assessment
:
Carcinogenicity classification not possible from current data.

67-64-1:
Species: Mouse, (female)
Application Route: Dermal
Exposure time: 365 d (90%) or 424 d (100%)
Dose: 0.1ml 90(71mg) or 100% (79mg)
Frequency of Treatment: 3 times per wk
NOAEL: 79
Result: did not display carcinogenic properties
Carcinogenicity - Assessment
:
Carcinogenicity classification not possible from current data.

Reproductive toxicity
108-88-3:
Effects on fertility
:
Test Type: Two-generation study
Species: Rat, male and female
Application Route: Inhalation
Dose: 0, 100, 500, 2000 ppm
Frequency of Treatment: 7 days/week
General Toxicity - Parent: NOAEC: 500 ppm
General Toxicity F1: NOAEC: 500 ppm
Fertility: NOAEC: 2,000 ppm
Symptoms: Reduced maternal body weight gain Reduced offspring weight gain
Method: OECD Test Guideline 416
Result: Animal testing did not show any effects on fertility.
GLP: yes
Test Type: Fertility
Species: Rat, male and female
Application Route: inhalation (vapour)
Dose: 0, 600, 1200 ppm
Frequency of Treatment: 7 days/week
General Toxicity - Parent: NOAEC: 600 ppm
Symptoms: Decreased sperm count
Result: Animal testing did not show any effects on fertility.
Effects on foetal development

:
Species: Rat
Application Route: inhalation (vapour)
Dose: 0, 250, 750, 1500, 3000 ppm
Duration of Single Treatment: 10 d
Frequency of Treatment: 6 hr/day
General Toxicity Maternal: NOAEC: 750 ppm
Developmental Toxicity: NOAEC: 750 ppm
Symptoms: Maternal toxicity, Reduced body weight, Skeletal malformations
GLP: yes
Reproductive toxicity - Assessment
:
Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
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 data.
64742-49-0 / 426260-76-6 / 64742-89-8:
Reproductive toxicity - Assessment
:
Fertility classification not possible from current data.
Embryotoxicity classification not possible from current data.
142-82-5:
Effects on fertility
:
Test Type: Two-generation study
Species: Rat, male and female
Application Route: vapour
Dose: 0, 900, 3000, 9000 ppm
Frequency of Treatment: 5 days/week
General Toxicity - Parent: NOAEC: 3,000 ppm
General Toxicity F1: NOAEC: 3,000 ppm

Fertility: NOAEC: 9,000 ppm
Symptoms: Reduced maternal body weight gain Reduced offspring weight gain
Method: OECD Test Guideline 416
Result: No reproductive effects.
GLP: yes
Remarks: Information given is based on data obtained from similar substances.
Effects on foetal development
:
Species: Mouse
Application Route: inhalation (vapour)
Dose: 0, 900, 3000, 9000 ppm
Duration of Single Treatment: 10 d
Frequency of Treatment: 6 hr/day
General Toxicity Maternal: NOAEC: 900 ppm
Developmental Toxicity: NOAEC: 3,000 ppm
Symptoms: Skeletal malformations
Method: OECD Test Guideline 414
GLP: yes
Remarks: Information given is based on data obtained from similar substances.
Reproductive toxicity - Assessment
:
Animal testing did not show any effects on fertility.
Embryotoxicity classification not possible from current data.
67-64-1:
Effects on fertility
:
Species: Rat, male
Application Route: oral
Dose: 0, 5000, 10000 mg/L
Frequency of Treatment: 7 days/week
General Toxicity - Parent: LOAEL: 10,000
Fertility: 10,000
Effects on foetal development
:
Species: Rat
Application Route: Inhalation
Dose: 0, 440, 2200, 11000 ppm
Frequency of Treatment: 7 days/week
General Toxicity Maternal: NOAEC: 2,200 ppm
Teratogenicity: NOAEC: 11,000 ppm
Embryo-foetal toxicity: NOAEC: 2,200 ppm
Method: OECD Test Guideline 414
Result: No teratogenic potential
GLP: No data available
Reproductive toxicity - Assessment
:
No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

STOT-single exposure
ACETONE

Remarks: May cause drowsiness or dizziness.

ACETONE

Result: No data available

STOT-repeated exposure
108-88-3:
Species: Rat, male and female
NOAEL: 300
Application Route: inhalation (vapour)
Exposure time: 6, 12, or 18 mths
Number of exposures: 6 h/d, 5 d/wk
Dose: 0, 30, 100, 300 ppm
Method: OECD Test Guideline 453
Repeated dose toxicity -
Assessment
:
Causes skin irritation.
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
64742-49-0 / 426260-76-6 / 64742-89-8:
Species: Rat, male
NOAEL: 12470 mg/m3
Application Route: inhalation (vapour)
Exposure time: 16 wks
Number of exposures: 12 h/d, 7 d/wk
Dose: 0, 12470 mg/m3
Remarks: Information given is based on data obtained from similar substances.
Species: Rat, male and female
NOAEL: 1402
Application Route: inhalation (vapour)
Test atmosphere: vapour
Exposure time: 13 weeks
Number of exposures: 6 hours/day, 5 days/week
Dose: 322, 1402, 9869 mg/m3
GLP: yes
Target Organs: Kidney
Symptoms: Nasal and ocular discharge
142-82-5:
Species: Rat, male
NOAEL: 12470 mg/m3
Application Route: inhalation (vapour)
Exposure time: 16 wks
Number of exposures: 12 h/d, 7 d/wk

Dose: 0, 12470 mg/3
Repeated dose toxicity -
Assessment
:
Causes skin irritation.
67-64-1:
Species: Mouse, male
NOAEL: 20000
Application Route: Oral
Exposure time: 13 wk
Number of exposures: daily
Dose: 1250, 2500, 5000, 10000, 20000
Method: OECD Test Guideline 408
GLP: No data available
Species: Mouse, female
NOAEL: 20000
LOAEL: 50000
Application Route: Oral
Exposure time: 13 wk
Number of exposures: daily
Dose: 2500, 5000, 10000, 20000, 5000
Method: OECD Test Guideline 408
GLP: No data available
Repeated dose toxicity -
Assessment
:
Causes mild skin irritation., Causes serious eye irritation.

Aspiration hazard
108-88-3:
May be fatal if swallowed and enters airways.
64742-49-0 / 426260-76-6 / 64742-89-8:
May be fatal if swallowed and enters airways.
142-82-5:
May be fatal if swallowed and enters airways.

Additional information
Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

SECTION 12: Ecological information

Toxicity
108-88-3:
Toxicity to fish
:
LC50 (Oncorhynchus mykiss (rainbow trout)): 5.5
mg/l
Exposure time: 96 h
Test Type: flow-through test
Toxicity to daphnia and
other aquatic invertebrates
:

EC50 (Ceriodaphnia dubia): 3.78 mg/l
Exposure time: 48 h
Test Type: Renewal
Toxicity to algae
:
EC50 (Chlorella vulgaris (Fresh water algae)): 134 mg/l
Exposure time: 3 h
Test Type: static test
Toxicity to bacteria
:
IC50 (Bacteria): 84 mg/l
Exposure time: 24 h
Test Type: Static
Ecotoxicology Assessment
Acute aquatic toxicity
:
Toxic to aquatic life.
Chronic aquatic toxicity
:
Toxic to aquatic life with long lasting effects.
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
64742-49-0 / 426260-76-6 / 64742-89-8:
Toxicity to fish
:
LC50 (Carassius auratus (goldfish)): 4 mg/l
Exposure time: 24 h

Remarks: Information given is based on data obtained
from similar substances.
Toxicity to daphnia and
other aquatic invertebrates
:
EC50 (Daphnia magna (Water flea)): 1.5 mg/l
Exposure time: 48 h
Test Type: static test
Remarks: Information given is based on data obtained
from similar substances.
Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)):
3.7 mg/l
Exposure time: 96 h
Test Type: static test
Ecotoxicology Assessment
Acute aquatic toxicity
:
Very toxic to aquatic life.
Chronic aquatic toxicity
:
Very toxic to aquatic life with long lasting effects.
142-82-5:
Toxicity to fish
:
LC50 (Carassius auratus (goldfish)): 4 mg/l
Exposure time: 24 h
Remarks: Very toxic to aquatic organisms, may cause
long-term adverse effects in the aquatic environment.
Toxicity to daphnia and
other aquatic invertebrates
:
EC50 (Daphnia magna (Water flea)): 1.5 mg/l
Exposure time: 48 h
Test Type: static test
Remarks: Very toxic to aquatic organisms.
Toxicity to algae
:
Remarks: No data available
Ecotoxicology Assessment
Acute aquatic toxicity
:
Very toxic to aquatic life.
Chronic aquatic toxicity
:
Very toxic to aquatic life with long lasting effects.
67-64-1:
Toxicity to fish
:
LC50 (Oncorhynchus mykiss (rainbow trout)): 6,100
mg/l
Exposure time: 48 h
Toxicity to daphnia and
other aquatic invertebrates
:

EC50 (Daphnia magna (Water flea)): 7,630 mg/l
Exposure time: 48 h
Test substance: Acetone
Toxicity to algae
:
Remarks: No data available

Persistence and degradability
108-88-3:
Biodegradability
:
Inoculum: Sewage
Biodegradation: 100 %
Remarks: 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 - 1120COD: 1420
Stability in water
:
Hydrolysis: 91 % at19 °C(72 h)
Remarks: Hydrolyses on contact with water.
Hydrolyses readily.
64742-49-0 / 426260-76-6 / 64742-89-8:
Biodegradability
:
aerobic
Inoculum: activated sludge
Concentration: 20 mg/l
Biodegradation: 74.30 %
Exposure time: 56 d
GLP: yes
Remarks: Inherently biodegradable.
142-82-5:
Biodegradability
:
Primary biodegradation
Inoculum: activated sludge
Concentration: 100 mg/l
Biodegradation: 100 %

Testing period: 2 d
Exposure time: 25 d
Remarks: Readily biodegradable
67-64-1:
Biodegradability
:
Remarks: Readily biodegradable

Bioaccumulative potential
108-88-3:
Partition coefficient: noctanol/
water
: log Pow: 2.73
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 and very bioaccumulating (vPvB).
Partition coefficient: noctanol/
water
: log Pow: -0.77
64742-49-0 / 426260-76-6 / 64742-89-8:
Partition coefficient: noctanol/
water
: log Pow: 2.13 - 4.85 (25 °C)
67-64-1:
Partition coefficient: noctanol/
water
: log Pow: -0.24

Mobility in soil
No data available.

Results of PBT and vPvB assessment
No data available.

Other adverse effects
No data available.

SECTION 13: Disposal considerations

Disposal of the product
Discharge, treatment, or disposal may be subject to national, state, or local laws.

Disposal of contaminated packaging
Discharge, treatment, or disposal may be subject to national, state, or local laws.

Waste treatment
No data available.

Sewage disposal
No data available.

Other disposal recommendations
No data available.

SECTION 14: Transport information

UN Number	1993
UN Proper Shipping Name	Flammable liquids, n.o.s., (HEPTANE, BRANCHED, CYCLIC AND LINEAR, TOLUENE)
Transport hazard class(es)	3
Packing group	II

Environmental hazards
Not regulated

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components
108-88-3 Toluene 30 - 50 %
67-56-1 Methanol 20 - 30 %
142-82-5 Heptane 10 - 20 %
67-64-1 Acetone 10 - 20 %
71-43-2 Benzene 0 - 0.1 %

New Jersey Right To Know Components
108-88-3 Toluene 30 - 50 %
67-56-1 Methanol 20 - 30 %
64742-49-0 /
426260-76-6
/ 64742-89-8
Naphtha (pet), hydrotreated lt
AND/OR Heptane, branched, cyclic
and linear AND/OR Solvent naphtha
(pet), lt aliph.
20 - 30 %
142-82-5 Heptane 10 - 20 %
67-64-1 Acetone 10 - 20 %

Pennsylvania Right To Know Components
108-88-3 Toluene 30 - 50 %
67-56-1 Methanol 20 - 30 %
64742-49-0 /
426260-76-6
/ 64742-89-8
Naphtha (pet), hydrotreated lt
AND/OR Heptane, branched, cyclic
and linear AND/OR Solvent naphtha
(pet), lt aliph.
20 - 30 %
142-82-5 Heptane 10 - 20 %

67-64-1 Acetone 10 - 20 %
71-43-2 Benzene 0 - 0.1 %
100-41-4 Ethylbenzene 0 - 0.1 %

California Prop. 65 components
71-43-2 Benzene
100-41-4 Ethylbenzene
98-82-8 **Cumene
91-20-3 **Naphthalene
98-82-8 Cumene
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
108-88-3 Toluene
67-56-1 Methanol
71-43-2 Benzene

CERCLA RQ
Toluene, CAS: 108-88-3.....RQ 1000

SARA 311/312 Hazards
Fire Hazard
Immediate (Acute) Health Hazard
Chronic (Delayed) Health Hazard

SARA 313 Components
108-88-3
Toluene 40.0249 %
67-56-1
Methanol 25.0006 %

Clean Air Act
The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):
108-88-3 Toluene 40.0249 %
67-56-1 Methanol 25.0006 %
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 SOCMI Intermediate or Final VOC's (40 CFR 60.489):
108-88-3 Toluene 40.0249 %
67-56-1 Methanol 25.0006 %
67-64-1 Acetone 10 %

Toxic Substances Control Act (TSCA) Inventory
Listed

HMIS Rating

Lacquer Thinner	
HEALTH	* 2
FLAMMABILITY	3
PHYSICAL HAZARD	
PERSONAL PROTECTION	

NFPA Rating

SECTION 16: Other information

Revision Date:
4/14/2016

Other Information:
This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
Party Responsible for the Preparation of This Document
Ardex Laboratories, Inc. 2050 Byberry rd Philadelphia, PA 19116 T: 215-698-0500 ardexlabs.com
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
North America GHS US 2012