

Safety Data Sheet Brake Kleen

Version 0.0

Revision Date: 05/29/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Brake Kleen
Product Use Description : Industrial chemical

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
Skin irritation : Category 2
Eye irritation : Category 2A
Specific target organ toxicity - single exposure : Category 3 (Central nervous system)
Specific target organ toxicity - repeated exposure : Category 2 (Liver, Kidney, Central nervous system)
Specific target organ toxicity - repeated exposure (Oral) : Category 2
Aspiration hazard : Category 1

GHS Label element

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Hazard pictograms :



Signal word :

Danger

Hazard statements :

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
H373 May cause damage to organs (Liver, Kidney, Central nervous system) through prolonged or repeated exposure.

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.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
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.
P314 Get medical advice/ attention if you feel unwell.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical

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advice/ attention.

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

P362 Take off contaminated clothing and wash before reuse.

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.

Potential Health Effects

Carcinogenicity:

IARC

Group 2B: Possibly carcinogenic to humans

100-41-4

**Ethylbenzene

ACGIH

Confirmed animal carcinogen with unknown relevance to humans

100-41-4

**Ethylbenzene

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

Appearance	liquid
Colour	clear, white
Hazard Summary	No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

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Hazardous components

CAS-No.	Chemical Name	Concentration (%)
67-64-1	Acetone	50 - 70
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.	30 - 50
142-82-5	Heptane	10 - 20
1330-20-7	Mixed xylenes	1 - 5
100-41-4	**Ethylbenzene	0.1 - 1

Special Notes:

: ** Other substances in the product which may present a health or environmental hazard.

SECTION 4. 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.

SECTION 5. FIREFIGHTING MEASURES

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Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. 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.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for fire-fighting 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.

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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.
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
67-64-1	Acetone	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH

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		TWA	250 ppm 590 mg/m3	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m3	OSHA Z-1
		TWA	750 ppm 1,800 mg/m3	OSHA P0
		STEL	1,000 ppm 2,400 mg/m3	OSHA P0
64742-49-0 / 426260- 76-6 / 64742-89-8	Naphtha (pet), hydrotreat- ed It AND/OR Heptane, branched, cyclic and linear AND/OR Solvent naphtha (pet), It aliph.	TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
142-82-5	Heptane	TWA	85 ppm 350 mg/m3	NIOSH REL
		C	440 ppm 1,800 mg/m3	NIOSH REL
		TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA P0
		STEL	500 ppm 2,000 mg/m3	OSHA P0
1330-20-7	Mixed xylenes	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
		TWA	100 ppm 435 mg/m3	OSHA Z-1
100-41-4	**Ethylbenzene	TWA	20 ppm	ACGIH
		TWA	100 ppm 435 mg/m3	NIOSH REL
		ST	125 ppm 545 mg/m3	NIOSH REL
		TWA	100 ppm 435 mg/m3	OSHA Z-1
		TWA	100 ppm 435 mg/m3	OSHA P0
		STEL	125 ppm 545 mg/m3	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control paramet- ers	Biological specimen	Sam- pling time	Permissi- ble con- centration	Basis
Acetone	67-64-1	Acetone	Urine	End of shift (As soon as possible)	50 mg/l	ACGIH BEI

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				after expo- sure ceases)		
**Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid	Urine	End of shift at end of work- week	0.7 g/g creatinine	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
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 : 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

Appearance : liquid

Colour : clear, white

Odour : No data available

Odour Threshold : No data available

pH : No data available

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Freezing Point	: No data available
Boiling Point	: No data available
Flash point	: -20 °C (-4 °F)
Evaporation rate	: No data available
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	: No data available
Relative density	: No data available
Density	: 0.744 g/cm ³
Bulk density	: No data available
Water solubility	: No data available
Solubility in other sol- vents	: 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.

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Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Acids alkalis amines Ammonia halogens Peroxides Reducing agents Strong oxidizing agents Oxygen
Hazardous decomposition products	: None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 30000 ppm Exposure time: 4 h Test atmosphere: gas Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method

Components:

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

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
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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.

1330-20-7:

Acute oral toxicity : LD50 (rat, male): 3,523 mg/kg
Method: EU Method B.1 (Acute Toxicity, Oral)
GLP: no

Acute inhalation toxicity : LC50 (rat, male): 6700 ppm
Exposure time: 4 h
Method: Directive 67/548/EEC, Annex V, B.2.
Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (rabbit): 1,100 mg/kg
Assessment: The component/mixture is moderately toxic after single contact with skin.

Skin corrosion/irritation

Product:

Result: Irritating to skin.

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Components:

67-64-1:

Species: rabbit
Exposure time: 24 h
Method: In vivo
Result: Mild 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.

1330-20-7:

Species: rabbit
Exposure time: 24 h
Result: Irritating to skin.

Serious eye damage/eye irritation

Product:

Result: Irritating to eyes.

Components:

67-64-1:

Species: rabbit
Result: Irritating to eyes.
Exposure time: 24 h

64742-49-0 / 426260-76-6 / 64742-89-8:

Result: No eye irritation

142-82-5:

Remarks: No data available

1330-20-7:

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Species: rabbit
Result: Irritating to eyes.

Respiratory or skin sensitisation

Components:

67-64-1:

Test Type: Maximization test
Species: guinea pig
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.

1330-20-7:

Remarks: No data available

Germ cell mutagenicity

Product:

Germ cell mutagenicity- : mutagenicity classification is not possible
Assessment

Components:

67-64-1:

Genotoxicity in vitro : Test Type: Mammalian cell gene mutation assay
Test species: Mouse lymphoma cells
Metabolic activation: Without metabolic activation
Method: OECD Test Guideline 476
Result: negative

: Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

: Test Type: Chromosome aberration test in vitro

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	<p>Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative</p>
Genotoxicity in vivo	<p>: 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</p>
Germ cell mutagenicity-Assessment	<p>: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.</p>
64742-49-0 / 426260-76-6 / 64742-89-8:	
Germ cell mutagenicity-Assessment	<p>: Mutagenicity classification not possible from current data</p>
142-82-5:	
Genotoxicity in vitro	<p>: Test Type: Chromosome aberration test in vitro Test species: Rat liver Metabolic activation: Without metabolic activation Method: OECD Test Guideline 473 Result: negative</p>
	<p>: Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative</p>
Germ cell mutagenicity-Assessment	<p>: Did not show mutagenic effects in animal experiments.</p>
1330-20-7:	
Genotoxicity in vitro	<p>: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation Method: Mutagenicity (in vitro mammalian cytogenetic test) Result: negative</p>
	<p>: Test Type: Sister chromatid exchange assay in mammalian cells Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation</p>

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Genotoxicity in vivo : Result: negative
: Test Type: Dominant lethal assay
: Test species: mouse
: Application Route: Subcutaneous
: Exposure time: 8 wk
: Dose: 1.0 mL/kg
: Method: OECD Test Guideline 478
: Result: negative
: GLP: no

Germ cell mutagenicity- : Animal testing did not show any mutagenic effects.
Assessment

Carcinogenicity

Product:

Carcinogenicity - As- : Not classifiable as a human carcinogen.
essment

Components:

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 - As- : Carcinogenicity classification not possible from current
assessment data.

64742-49-0 / 426260-76-6 / 64742-89-8:

Carcinogenicity - As- : Not classifiable as a human carcinogen.
assessment

142-82-5:

Remarks: This information is not available.

Carcinogenicity - As- : Carcinogenicity classification not possible from current
assessment data.

1330-20-7:

Species: mouse, (male and female)
Application Route: Oral
Exposure time: 103 wk
Dose: 0, 500 or 1000 mg/kg

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Frequency of Treatment: 5 days/week
Method: Directive 67/548/EEC, Annex V, B.32.
Result: did not display carcinogenic properties
GLP: No data available

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

100-41-4:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : No toxicity to reproduction

Components:

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, and on development, based on animal experiments.

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

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	<p>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.</p>
Effects on foetal development	<p>: 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.</p>
Reproductive toxicity - Assessment	<p>: Animal testing did not show any effects on fertility. Embryotoxicity classification not possible from current data.</p>
1330-20-7: Effects on fertility	<p>: Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 25, 100 and 500 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: > 500 ppm General Toxicity F1: NOAEC: > 500 ppm Early Embryonic Development: NOAEC: > 500 ppm Result: No reproductive effects.</p>
Effects on foetal development	<p>: Species: rat Application Route: Inhalation Dose: 0, 100, 500, 1000 or 2000 ppm Duration of Single Treatment: 14 d Frequency of Treatment: 6 hr/day General Toxicity Maternal: NOAEC: 500 ppm</p>

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Teratogenicity: NOAEC: > 2,000
Developmental Toxicity: NOAEC: 100 ppm
Result: No teratogenic effects., Developmental toxicity occurred at maternal toxicity dose levels

Reproductive toxicity - : Animal testing did not show any effects on fertility.
Assessment Damage to fetus not classifiable

STOT - single exposure

Product: No data available

Components:

67-64-1:

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.	

64742-49-0 / 426260-76-6 / 64742-89-8:

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.	

142-82-5:

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.	

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1330-20-7:

Exposure routes:	Target Organs:	Assessment:	Remarks:
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.	

100-41-4:No data available

STOT - repeated exposure

Product:No data available

Components:

67-64-1:No data available

64742-49-0 / 426260-76-6 / 64742-89-8:No data available

142-82-5:No data available

1330-20-7:

Exposure routes:	Target Organs:	Assessment:	Remarks:
	Liver, Kidney, Central nervous system	May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.	

100-41-4:No data available

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Repeated dose toxicity

Components:

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 - : Causes mild skin irritation., Causes serious eye irritation.
Assessment tion.

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)

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Exposure time: 16 wks
Number of exposures: 12 h/d, 7 d/wk
Dose: 0, 12470 mg/3

Repeated dose toxicity - : Causes skin irritation.
Assessment

1330-20-7:

Species: rat, male and female
NOAEL: 250 mg/kg
Application Route: Oral
Exposure time: 103 wk
Number of exposures: 5 d/wk
Dose: 0, 250 or 500 mg/kg
Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Aspiration toxicity

Product:

May be fatal if swallowed and enters airways.

Components:

64742-49-0 / 426260-76-6 / 64742-89-8:

May be fatal if swallowed and enters airways.

142-82-5:

Aspiration Toxicity - Category 1

1330-20-7:

May be fatal if swallowed and enters airways.

Further information

Product:

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

Ecotoxicity

Components:

67-64-1:

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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

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.

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1330-20-7:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.6 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1 mg/l
Exposure time: 24 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata): 4.36 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Components:

67-64-1:

Biodegradability : Remarks: Readily biodegradable

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

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Exposure time: 25 d
Remarks: Readily biodegradable

1330-20-7:

Biodegradability : Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 72 %
Exposure time: 20 d

Bioaccumulative potential

Components:

67-64-1:

Partition coefficient: n-octanol/water : log Pow: -0.24

64742-49-0 / 426260-76-6 / 64742-89-8:

Partition coefficient: n-octanol/water : log Pow: 2.13 - 4.85 (25 °C)

1330-20-7:

Partition coefficient: n-octanol/water : log Pow: 2.77 - 3.15

Mobility in soil

No data available

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 : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life with long lasting effects.

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 -

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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): UN1993, FLAMMABLE LIQUID, N.O.S., (ACETONE, HEPTANE) , 3, II, Flash Point:-20 °C(-4 °F)

IMDG (International Maritime Dangerous Goods): UN1993, FLAMMABLE LIQUID, N.O.S., (ACETONE, HEPTANE), 3, II, Marine Pollutant (HEPTANE, MIXED XYLENES)

DOT (Department of Transportation): UN1993, Flammable liquids, n.o.s., (ACETONE, HEPTANE), 3, II

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Flammable liquid, Aspiration hazard, Harmful by skin absorption., Moderate skin irritant, Moderate eye irritant, Moderate respiratory irritant

WHMIS Classification : B2: Flammable liquid
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)
Mixed xylenes	1330-20-7	100	3333

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

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Clean Air Act

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

100-41-4	**Ethylbenzene	0.9004 %
108-88-3	**Toluene	0.1954 %
98-82-8	**Cumene	0.0304 %
67-56-1	Methanol	0.0031 %
71-43-2	Benzene	0.0035 %
91-20-3	**Naphthalene	0.0004 %

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 SOCM Intermediate or Final VOC's (40 CFR 60.489):

67-64-1	Acetone	51.5 %
1330-20-7	Mixed xylenes	3 %
100-41-4	**Ethylbenzene	0.9004 %
108-88-3	**Toluene	0.1954 %
98-82-8	**Cumene	0.0304 %
67-56-1	Methanol	0.0031 %
71-43-2	Benzene	0.0035 %

Clean Water Act

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

1330-20-7	Mixed xylenes	3 %
100-41-4	**Ethylbenzene	0.9004 %
108-88-3	**Toluene	0.1954 %
71-43-2	Benzene	0.0035 %
91-20-3	**Naphthalene	0.0004 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

1330-20-7	Mixed xylenes	3 %
100-41-4	**Ethylbenzene	0.9004 %
108-88-3	**Toluene	0.1954 %
71-43-2	Benzene	0.0035 %
91-20-3	**Naphthalene	0.0004 %

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

67-64-1	Acetone	50 - 70 %
142-82-5	Heptane	10 - 20 %
1330-20-7	Mixed xylenes	1 - 5 %
71-43-2	Benzene	0 - 0.1 %

Pennsylvania Right To Know

67-64-1	Acetone	50 - 70 %
64742-49-0 /	Naphtha (pet), hydrotreated lt	30 - 50 %

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426260-76-6 / 64742-89-8	AND/OR Heptane, branched, cyclic and linear AND/OR Solvent naphtha (pet), It aliph.	
142-82-5	Heptane	10 - 20 %
1330-20-7	Mixed xylenes	1 - 5 %
100-41-4	**Ethylbenzene	0.1 - 1 %
108-88-3	**Toluene	0.1 - 1 %
98-82-8	**Cumene	0 - 0.1 %

New Jersey Right To Know

67-64-1	Acetone	50 - 70 %
64742-49-0 / 426260-76-6 / 64742-89-8	Naphtha (pet), hydrotreated It AND/OR Heptane, branched, cyclic and linear AND/OR Solvent naphtha (pet), It aliph.	30 - 50 %
142-82-5	Heptane	10 - 20 %
1330-20-7	Mixed xylenes	1 - 5 %
100-41-4	**Ethylbenzene	0.1 - 1 %
108-88-3	**Toluene	0.1 - 1 %

California Prop 65

	WARNING! This product contains a chemical known to the State of California to cause cancer.	
100-41-4	**Ethylbenzene	
98-82-8	**Cumene	
71-43-2	Benzene	
91-20-3	**Naphthalene	
	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	

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 this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	:	n (Negative listing) (Not in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	:	n (Negative listing)

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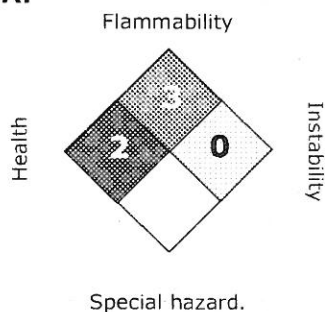
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		(Not in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	n (Negative listing) (Not in compliance with the inventory)
Korea. Korean Existing Chemicals Inventory (KECI)	:	n (Negative listing) (Not in compliance 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)	:	n (Negative listing) (Not in compliance with the inventory)

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:

000000207507

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Material number:

16063050, 16000590, 16000505, 16000504

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%