



# SAFETY DATA SHEET

## 1. Product and Company Identification

<b>PRODUCT NUMBER:</b>	1299	<b>COMPANY PHONE:</b>	1-800-241-8180
<b>PRODUCT NAME:</b>	BRAKE OUT	<b>EMERGENCY TELEPHONE:</b>	1-800-241-8180
<b>PRODUCT DESCRIPTION:</b>	Aerosol Non-chlorinated Brake Parts Cleaner	<b>INFOTRAC:</b>	1-800-535-5053
<b>COMPANY INFORMATION:</b>	<b>PRO CHEM, INC.</b> 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

## 2. Hazards Identification

### GHS CLASSIFICATION:

**Physical Hazards:** Flammable Aerosols: Category 1  
**Health Hazards:** Serious Eye Damage/Eye Irritation: Category 2A  
Sensitization Sensitizer: Category 1  
Carcinogenicity: Category 2  
Specific Target Organ Toxicity - Single Exposure: Category 3 (Narcotic Effects.)  
**Environmental Hazards:** Acute Hazards to the Aquatic Environment: Category 3

**SIGNAL WORD:**  
**DANGER**

**SYMBOL:**



### HAZARD STATEMENTS:

Extremely flammable aerosol. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing cancer. May cause drowsiness or dizziness. Harmful to aquatic life.

### PRECAUTIONARY STATEMENTS:

**Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

**Response:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Wash contaminated clothing before reuse.

**Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### HAZARDS NOT OTHERWISE SPECIFIED:

None.

## 3. Composition / Information on Ingredients

Chemical Name	CAS	Concentration % by Weight
2-Propanone	67-64-1	50 - <100%
Acetic acid, methyl ester	79-20-9	10 - <20%
Carbon Dioxide	124-38-9	5 - <10%
Benzene, dimethyl-	1330-20-7	1 - <5%
Heptane, branched, cyclic and linear	426260-76-6	1 - <2.5%
Heptane	142-82-5	1 - <5%
Naphtha (petroleum), hydrotreated light	64742-49-0	1 - <5%
Solvent naphtha (petroleum), light aliph.	64742-89-8	1 - <5%
Benzene, ethyl-	100-41-4	1 - <5%

\*All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

## 4. First Aid Measures

### EMERGENCY OVERVIEW

**EYES:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**SKIN:** If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

### INHALATION:

Move to fresh air.

### INGESTION:

Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

### PERSONAL PROTECTION FOR FIRST-AID RESPONDERS:

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

**MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:****Symptoms:** No data available.**Hazards:** No data available.**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:****Treatment:** Symptoms may be delayed.**5. Fire Fighting Measures****SUITABLE FIRE EXTINGUISHING MEDIA:**

Use fire-extinguishing media appropriate for surrounding materials.

**UNSUITABLE FIRE EXTINGUISHING MEDIA:**

Do not use water jet as an extinguisher, as this will spread the fire.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:**

Vapors may travel considerable distance to a source of ignition and flash back.

**SPECIFIC FIRE-FIGHTING METHODS:**

No data available.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:**

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

**GENERAL FIRE HAZARDS:**

Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

**6. Accidental Release Measures****PERSONAL PRECAUTIONS:**

Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**ACCIDENTAL RELEASE MEASURES:**

Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

**MATERIALS AND METHODS FOR CLEANUP:**

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

**ENVIRONMENTAL PRECAUTIONS:**

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

**7. Handling and Storage****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, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid contact with eyes, skin and clothing.

**Contact Avoidance Measures:** No data available.**Technical Measures (e.g. Local and general ventilation):** No data available.**SAFE STORAGE AND INCOMPATIBILITIES:**

Level 2 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not pierce or burn, even after use.

**Safe Packaging Materials:** No data available.**Storage Temperature:** No data available.**8. Exposure Controls / Personal Protection****CONTROL PARAMETERS****Occupational Exposure Limits:**

Chemical Identity	Type	Exposure Limit Values		Source
2-Propanone	STEL	1,000 ppm	24,000 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	PEL	1,000 ppm	24,000 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	250 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	750 ppm	1,800 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	500 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	250 ppm	590 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Acetic acid, methyl ester	REL	200 ppm	610 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	250 ppm	760 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	200 ppm	610 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	STEL	250 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	200 ppm	610 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

Carbon Dioxide	STEL	250 ppm	760 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
	TWA	200 ppm		US. ACGIH Threshold Limit Values, as amended	
	TWA	5,000 ppm		US. ACGIH Threshold Limit Values, as amended	
	STEL	30,000 ppm		US. ACGIH Threshold Limit Values, as amended	
	STEL	30,000 ppm	54,000 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
	REL	5,000 ppm	9,000 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
	PEL	5,000 ppm	9,000 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended	
Benzene, dimethyl-	TWA	10,000 ppm	18,000 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
	STEL	30,000 ppm	54,000 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
	TWA	100 ppm	435 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
	TWA	100 ppm		US. ACGIH Threshold Limit Values, as amended	
	PEL	100 ppm	435 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended	
	STEL	150 ppm	655 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
	STEL	150 ppm		US. ACGIH Threshold Limit Values, as amended	
Naphtha (petroleum), hydrotreated light	STEL	150 ppm	655 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
	REL	100 ppm	435 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
	REL	100 ppm	400 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
	TWA	100 ppm	400 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
	PEL	100 ppm	400 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended	
	Heptane (CAS 142-82-5)	TWA	400 ppm	1,600 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
		REL	85 ppm	350 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
PEL		500 ppm	2,000 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended	
STEL		500 ppm	2,000 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
TWA		400 ppm		US. ACGIH Threshold Limit Values, as amended	
STEL		500 ppm		US. ACGIH Threshold Limit Values, as amended	
Ceil_Time		440 ppm	1,800 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
Benzene, ethyl-	STEL	125 ppm	545 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
	REL	100 ppm	435 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
	PEL	100 ppm	435 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended	
	STEL	125 ppm	545 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
	TWA	100 ppm	435 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended	
	Cyclohexane, methyl-	PEL	500 ppm	2,000 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
TWA		400 ppm	1,600 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
TWA		400 ppm		US. ACGIH Threshold Limit Values, as amended	
REL		400 ppm	1,600 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
Benzene, methyl-		STEL	150 ppm	560 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

	REL	100 ppm	375 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	100 ppm	375 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	Ceiling	300 ppm		US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	200 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	MAX. CONC	500 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	STEL	150 ppm	560mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Hexane	TWA	50 ppm	180 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	PEL	500 ppm	1,800 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	REL	50 ppm	180 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	50 ppm		US. ACGIH Threshold Limit Values, as amended
Cyclohexane	TWA	100 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	300 ppm	1,050 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	REL	300 ppm	1,050 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	300 ppm	1,050 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-methylene-	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended
Benzene	REL	0.1 ppm		US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	1 ppm		US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	Ceiling	25 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	TWA	0.5 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	2.5 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	5 ppm		US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
	OSHA_AC T	0.5 ppm		US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
	TWA	10 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	MAX. CONC	50 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	STEL	5 ppm		US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	1 ppm		US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
	STEL	1 ppm		US. NIOSH: Pocket Guide to Chemical Hazards, as amended

**BIOLOGICAL LIMIT VALUE:**

Chemical Identity	Exposure Limit Values	Source
2-Propanone (acetone: Sampling time: End of shift.)	25 mg/l (Urine)	ACGIH BEL
Benzene, dimethyl- (Methylhippuric acids: Sampling time: End of shift.)	1.5 g/g (Creatinine in urine)	ACGIH BEL
Benzene, ethyl- (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.)	0.15 g/g (Creatinine in urine)	ACGIH BEL
Benzene, methyl- (toluene: Sampling time: End of shift.)	0.03 mg/l (Urine)	ACGIH BEL
Benzene, methyl- (o-Cresol, with hydrolysis: Sampling time: End of shift.)	0.3 mg/g (Creatinine in urine)	ACGIH BEL
Benzene, methyl- (toluene: Sampling time: Prior to last shift of work week.)	0.02 mg/l (Blood)	ACGIH BEL
Hexane (2,5-Hexanedion, without hydrolysis: Sampling time: End of shift.)	0.5 mg/l (Urine)	ACGIH BEL
Benzene (S-Phenylmercapturic acid: Sampling time: End of shift.)	25 µg/g (Creatinine in urine)	ACGIH BEL
Benzene (t,t-Muconic acid: Sampling time: End of shift.)	500 µg/g (Creatinine in urine)	ACGIH BEL

**EXPOSURE GUIDELINES:**

Hexane	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.
Benzene	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.

**APPROPRIATE ENGINEERING CONTROLS:**

No data available.

**INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:****Eye/Face Protection:** Wear safety glasses with side shields (or goggles).**Skin Protection:** Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information. **Hand Protection:** No data available.**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.**General Hygiene Considerations:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. When using do not smoke. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.**9. Physical & Chemical Properties**

<b>Physical State:</b>	Liquid.	<b>Flammability (solid/gas):</b>	No data available.
<b>Form:</b>	Spray Aerosol.	<b>Explosive Limit – lower (%):</b>	Estimated 13.2% (V)
<b>Color:</b>	No data available.	<b>Explosive Limit – upper (%):</b>	Estimated 2.6% (V)
<b>Odor:</b>	No data available.	<b>Vapor Pressure:</b>	4,826 - 6,205 hPa (20°C)
<b>Odor Threshold:</b>	No data available.	<b>Vapor Density (air=1) :</b>	No data available.
<b>pH:</b>	No data available.	<b>Relative Density:</b>	No data available.
<b>Freezing Point:</b>	No data available.	<b>Solubility (water):</b>	No data available.
<b>Boiling Point:</b>	Estimated 46.17°C	<b>Solubility (other):</b>	No data available.
<b>Partition Coeff (n-octanol/water):</b>	No data available.	<b>Self-Ignition Temperature:</b>	No data available.
<b>Flash Point:</b>	-14.6°C	<b>Decomposition Temperature:</b>	No data available.
<b>Kinematic Viscosity:</b>	No data available.	<b>Evaporation Rate:</b>	No data available.
<b>Dynamic Viscosity:</b>	No data available.	<b>Oxidizing Properties:</b>	No data available.
<b>Density:</b>	No data available.	<b>Explosive Properties:</b>	No data available.

**10. Stability & Reactivity Information****REACTIVITY:**

No data available.

**CHEMICAL STABILITY:**

Material is stable under normal conditions.

**POSSIBILITY OF HAZARDOUS REACTIONS:**

No data available.

**INCOMPATIBLE MATERIALS:**

No data available.

**CONDITIONS TO AVOID:**

Avoid heat or contamination.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

No data available.

**11. Toxicological Information****PRIMARY ROUTE OF ENTRY:****Eyes:** No data available.**Skin:** No data available.**Inhalation:** No data available.**Ingestion:** No data available.**SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:****Eyes:** No data available.**Skin:** No data available.**Inhalation:** No data available.**Ingestion:** No data available.**ACUTE TOXICITY (list all possible routes of exposure):****Oral Product:** Not classified for acute toxicity based on available data.**Dermal Product:** ATEmix: 45,772.48 mg/kg**Inhalation Product:** ATEmix: 509.15 mg/l Vapour

**REPEATED DOSE TOXICITY:****Product:** No data available.**Components**

2-Propanone	NOAEL (Rat(Male), Oral, 13 Weeks): 10,000 ppm(m) Oral Experimental result, Key study
Acetic acid, methyl ester	NOAEL (Rat(Female, Male), Inhalation, 28 d): 350 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation, 28 d): 2,000 ppm(m) Inhalation Experimental result, Key study
Benzene, dimethyl-	NOAEL (Rat(Female), Oral, 90 d): 150 mg/kg Oral Experimental result, Key study
Heptane	NOAEL (Rat(Male), Inhalation): 12,470 mg/m <sup>3</sup> Inhalation Experimental result, Key study
Naphtha (petroleum), hydrotreated light	NOAEL (Rat(Female, Male), Inhalation): 10,000 mg/m <sup>3</sup> Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Oral, 13 Weeks): 1,250 mg/kg Oral Read-across based on grouping of substances (category approach), Key study NOAEL (Rat(Female, Male), Dermal, 28 d): > 375 mg/kg Dermal Experimental result, Supporting study
Solvent naphtha (petroleum), light aliph.	NOAEL (Mouse, Rat(Female, Male), Inhalation, 107 - 113 Weeks): 1,402 mg/m <sup>3</sup> Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Dermal, 5 - 28 d): 3,750 mg/kg Dermal Experimental result, Key study NOAEL (Rat(Female, Male), Dermal, 28 d): > 375 mg/kg Dermal Experimental result, Supporting study
Benzene, ethyl-	NOAEL (Mouse(Female, Male), Inhalation, 104 Weeks): 75 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Oral, 28 d): 75 mg/kg Oral Experimental result, Key study

**SKIN CORROSION/IRRITATION:****Product:** No data available.**COMPONENTS****TEST RESULTS**

2-Propanone	in vivo (Rabbit): Not irritant
Acetic acid, methyl ester	in vivo (Rabbit): Not irritant
Benzene, dimethyl-	in vivo (Rabbit): Moderate irritant estimated irritating
Heptane, branched, cyclic and linear	Assessment irritating
Heptane	in vivo (Rabbit): Irritating
Naphtha (petroleum), hydrotreated light	Assessment Non-Irritating. In vitro (Human): Not corrosive
Solvent naphtha (petroleum), light aliph.	Assessment Non-Irritating

**SERIOUS EYE DAMAGE/IRRITATION:****Product:** No data available.**COMPONENTS****TEST RESULTS**

2-Propanone	Irritating. Rabbit, 24 hrs: Minimum grade of severe eye irritant
Acetic acid, methyl ester	Rabbit: Irritating
Benzene, dimethyl-	Rabbit, 1 hrs: Slightly irritating (Not Classified)
Heptane	Rabbit, 24 - 72 hrs: Not irritating
Naphtha (petroleum), hydrotreated light	Rabbit, 24 - 72 hrs: Not irritating
Solvent naphtha (petroleum), light aliph.	Rabbit: Not irritating

**RESPIRATORY OR SKIN SENSITIZATION:****Product:** No data available.**COMPONENTS****TEST RESULTS**

2-Propanone	Skin sensitization:, in vivo (Guinea pig): Non sensitizing
Heptane	Skin sensitization:, in vivo (Guinea pig): Non sensitizing
Naphtha (petroleum), hydrotreated light	Skin sensitization:, in vivo (Guinea pig): Non sensitizing
Solvent naphtha (petroleum), light aliph.	Skin sensitization:, in vivo (Guinea pig): Non sensitizing
Benzene, dimethyl-	Skin sensitization:, in vivo (Human): Non sensitizing

**CARCINOGENICITY:****Product:** No data available.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Benzene, ethyl- Overall evaluation: 2B. Possibly carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

Benzene, ethyl- Overall evaluation: 2B. Possibly carcinogenic to humans.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogenic components identified

**GERM CELL MUTAGENICITY:****In vitro Product:** No data available.**In vivo Product:** No data available.**REPRODUCTIVE TOXICITY:**

No data available.

**SPECIFIC TARGET ORGAN TOXICITY (single exposure):****Product:** No data available.**Components:**2-Propanone Inhalation – vapor: Narcotic effect. – Category with narcotic effects.  
Heptane Narcotic effect. – Category 3 with narcotic effects.**SPECIFIC TARGET ORGAN TOXICITY (repeated exposures):****Product:** No data available.**Components:**

Benzene, ethyl- Category 2

**Target Organs:** Specific Target Organ Toxicity – Single Exposure: Narcotic Effect.**ASPIRATION HAZARD:****Product:** No data available.**Components:**Heptane, branched, cyclic and linear May be fatal if swallowed and enters airways.  
Heptane May be fatal if swallowed and enters airways.  
Naphtha (petroleum), hydrotreated light May be fatal if swallowed and enters airways.  
Solvent naphtha (petroleum), light aliph. May be fatal if swallowed and enters airways.  
Benzene, ethyl- May be fatal if swallowed and enters airways.**OTHER EFFECTS:**

No data available.

**12. Ecological Information****ECOTOXICITY:****ACUTE HAZARDS TO THE AQUATIC ENVIRONMENT:****Fish:****Product:** No data available.**Components****Test Results**

2-Propanone	LC 50 (Oncorhynchus mykiss, 96 h): 5,540 mg/l Experimental result, Key study
Acetic acid, methyl ester	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 295 - 348 mg/l Mortality LC 50 (Danio rerio, 48 h): 250 - 350 mg/l Experimental result, Key study
Heptane	Rabbit, 1 hrs: Slightly irritating (Not Classified)
Naphtha (petroleum), hydrotreated light	LC 50 (96 h): 8.41 mg/l Experimental result, Key study
Benzene, ethyl-	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 38.9 - 62.83 mg/l Mortality

**AQUATIC INVERTEBRATES:****Product:** No data available.**Components****Test Results**

2-Propanone	LC 50 (Daphnia pulex, 48 h): 8,800 mg/l Experimental result, Key study
Acetic acid, methyl ester	EC 50 (Daphnia magna, 48 h): 1,026.7 mg/l Experimental result, Key study
Heptane	EC 50 (Daphnia magna, 48 h): 1.5 mg/l Experimental result, Key study
Naphtha (petroleum), hydrotreated light	EC 50 (Daphnia magna, 48 h): 4.5 mg/l Experimental result, Key study
Solvent naphtha (petroleum), light aliph.	EC 50 (Daphnia magna, 48 h): 32 mg/l Experimental result, Supporting study
Benzene, ethyl-	LC 50 (Water flea (Daphnia magna), 24 h): 57 - 100 mg/l Mortality

**CHRONIC HAZARDS TO THE AQUATIC ENVIRONMENT:****Fish:****Product:** No data available.**Components****Test Results**

Heptane	NOAEL (Oncorhynchus mykiss): 1.284 mg/l QSAR QSAR, Key study
Naphtha (petroleum), hydrotreated light	NOAEL (Daphnia magna): 2.6 mg/l Other, Key study

**AQUATIC INVERTEBRATES:****Product:** No data available.**Components****Test Results**

2-Propanone	LOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study NOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study
Heptane, branched, cyclic and linear	NOEC : < 1 mg/l estimation
Heptane	NOAEL (Daphnia magna): 0.17 mg/l Read-across based on grouping of substances (category approach), Key study EC 50 (Daphnia magna): 0.23 mg/l Read-across based on grouping of substances (category approach), Key study
Naphtha (petroleum), hydrotreated light	EC 50 (Daphnia magna): 10 mg/l Experimental result, Key study
Benzene, ethyl-	LC 50 (Ceriodaphnia dubia): 3.2 mg/l Other, Key study NOAEL (Ceriodaphnia dubia): 1 mg/l Other, Key study

**TOXICITY TO AQUATIC PLANTS:****Product:** No data available.**PERSISTENCE AND DEGRADABILITY:****Biodegradation Product:** No data available.**Components****Test Results**

2-Propanone	90.9% (28 d) Detected in water. Experimental result, Key study
Acetic acid, methyl ester	70% Detected in water. Experimental result, Key study
Benzene, dimethyl-	87.8% Detected in water. Read-across from supporting substance (structural analogue or surrogate), Key study

Heptane	70% Detected in water. Experimental result, Key study
Naphtha (petroleum), hydrotreated light	90.35% (28 d) Detected in water. Experimental result, Supporting study
Solvent naphtha (petroleum), light aliph.	90.35 % (28 d) Detected in water. Experimental result, Supporting study
Benzene, ethyl-	2.7% Detected in water. Other, Supporting study
	70 - 80% (28 d) Detected in water. Experimental result, Key study

**BOD/COD RATIO:**

Product: No data available.

**BIOACCUMULATIVE POTENTIAL:**

**BIOCONCENTRATION FACTOR (BCF):**

Product: No data available.

Components	Test Results
2-Propanone	Haddock, adult, Bioconcentration Factor (BCF): 0.69 Aquatic sediment Experimental result, Not specified
Benzene, dimethyl-	Oncorhynchus mykiss, Bioconcentration Factor (BCF): > 7.6 - < 21.6 Aquatic sediment Experimental result, Key study
Heptane	Bioconcentration Factor (BCF): 552 Aquatic sediment Estimated by calculation, Key study
Heptane	70% Detected in water. Experimental result, Key study
Naphtha (petroleum), hydrotreated light	Bioconcentration Factor (BCF): 10 - 2,500 Aquatic sediment Estimated by calculation, Key study
Solvent naphtha (petroleum), light aliph.	Bioconcentration Factor (BCF): 10 - 2,500 Aquatic sediment Estimated by calculation, Key study
Benzene, ethyl-	Carassius auratus, Bioconcentration Factor (BCF): 15.5 Aquatic sediment Other, Supporting study

**PARTITION COEFFICIENT N-OCTANOL / WATER (LOG KOW):**

Product: No data available.

Components	Test Results
Benzene, dimethyl-	Log Kow: 2.77 - 3.15 Not specified, Not specified
Naphtha (petroleum), hydrotreated light	Log Kow: > 2.4 - < 5.7 23°C Yes Experimental result, Key study
Benzene, ethyl-	Log Kow: 3.13 - 3.14 No Other, Supporting study

**MOBILITY IN SOIL:**

No data available.

Components	Test Results
2-Propanone	No data available.
Acetic acid, methyl ester	No data available.
Carbon dioxide	No data available.
Benzene, dimethyl-	No data available.
Heptane, branched, cyclic and linear	No data available.
Heptane	No data available.
Naphtha (petroleum), hydrotreated light	No data available.
Solvent naphtha (petroleum), light aliph.	No data available.
Benzene, ethyl-	No data available.

**OTHER ADVERSE EFFECTS:**

Harmful to aquatic organisms.

**13. Disposal Consideration**

**DISPOSAL INSTRUCTIONS:**

Discharge, treatment, or disposal may be subject to national, state or local laws.

**CONTAMINATED PACKAGING:**

No data available.



## 14. Transportation Information

**DOT:** UN Number: UN1950.  
UN Proper Shipping Name: Aerosols, flammable.  
Transport Hazard Class(es)  
Class: 2.1.  
Label(s): -  
EmS No:  
Packing Group: II  
Special Precautions for User: Not regulated.

**IATA:** UN Number: UN1950.  
UN Proper Shipping Name: Aerosols, flammable.  
Transport Hazard Class(es)  
Class: 2.1.  
Label(s): -  
Packing Group: -  
Special Precautions for User: Not regulated.  
Other Information:  
Passenger and Cargo Aircraft: Allowed. 203  
Cargo Aircraft Only: Allowed. 203

**IMDG:** UN Number: UN1950  
UN Proper Shipping Name: Aerosols, flammable.  
Transport Hazard Class(es)  
Class: 2  
Label(s): -  
EmS No:  
Packing Group: -  
Special Precautions for User: Not regulated.



## 15. Regulatory Information

### US FEDERAL REGULATIONS:

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

#### Chemical Identity

Benzene

#### OSHA hazard(s)

Flammability

Cancer

Aspiration

Eye

Blood

Skin

Respiratory tract irritation

Central nervous system

### CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4):

#### Chemical Identity

ACETONE

RCRA HAZARDOUS WASTE NO. D001

Acetic acid, methyl ester

XYLENE (MIXED)

UNLISTED HAZARDOUS WASTES CHARACTERISTIC OF IGNITABILITY

ETHYLBENZENE

BENZENE, METHYL-

HEXANE

CYCLOHEXANE

BENZENE, HEXAHYDRO-

BENZENE

### SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA)

#### HAZARD CATEGORIES:

Flammable aerosol, Serious Eye Damage/Eye Irritation, Skin sensitizer, Carcinogenicity, Specific

Target Organ Toxicity - Single Exposure

### US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

### US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

#### Chemical Identity

Benzene, dimethyl

#### % by weight

1.0%

Benzene, ethyl-

0.1%

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

**US STATE REGULATIONS:****US. California Proposition 65**

For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**US. New Jersey Worker and Community Right-to-Know Act:****Chemical Identity:**

2-Propanone  
 Acetic acid, methyl ester  
 Carbon dioxide  
 Benzene, dimethyl-  
 Naphtha (petroleum), hydrotreated light  
 Heptane  
 Benzene, ethyl-

**US. Massachusetts RTK - Substance List:**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances:****Chemical Identity:**

2-Propanone  
 Acetic acid, methyl ester  
 Carbon dioxide  
 Benzene, dimethyl-  
 Naphtha (petroleum), hydrotreated light  
 Heptane

**US. Rhode Island RTK:**

No ingredient regulated by RI Right-to-Know Law present.

**INTERNATIONAL REGULATIONS:****Montreal Protocol:**

2-Propanone  
 Acetic acid, methyl ester

**Stockholm Convention:**

Montreal protocol  
 2-Propanone

**Rotterdam Convention:**

2-Propanone  
 Acetic acid, methyl ester

**Kyoto Protocol:****INVENTORY STATUS:**

Australia AICS	Not in compliance with the inventory.
Canada DSL Inventory List	On or in compliance with the inventory.
EINECS, ELINCS or NLP	Not in compliance with the inventory.
Japan (ENCS) List	Not in compliance with the inventory.
Canada NDSL Inventory	Not in compliance with the inventory.
Philippines PICCS	On or in compliance with the inventory.
US TSCA Inventory	On or in compliance with the inventory.
Japan ISHL Listing	Not in compliance with the inventory.
Japan Pharmacopoeia Listing	Not in compliance with the inventory.
Mexico INSQ	Not in compliance with the inventory.
Ontario Inventory	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory	On or in compliance with the inventory.
China Inv. Existing Chemical Substances	On or in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI)	Not in compliance with the inventory.
New Zealand Inventory of Chemicals	On or in compliance with the inventory.

**16. Other Information****DISCLAIMER:**

To the best of our knowledge, information contained herein is accurate. However, there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard, which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product, which may not be covered by this SDS. The user is responsible for full compliance.

