

SAFETY DATA SHEET

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Section 1. Identification

GHS product identifier : A1293 BLACK
Chemical name : Mixture
CAS number : Mixture
Other means of identification : FO20001529
Product type : liquid

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications. Plastics.

Supplier's details : **POLYONE CORPORATION**
33587 Walker Road, Avon Lake, OH 44012

1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone number (with hours of operation) : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2
ACUTE TOXICITY (oral) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

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Supplemental label elements : None known.
Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Chemical name : Mixture
Other means of identification : FO20001529

CAS number/other identifiers

Ingredient name	%	CAS number
Methyl ethyl ketone	30 - 60	78-93-3
Benzene, methyl-	10 - 30	108-88-3
Methyl isobutyl ketone	10 - 30	108-10-1
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	1 - 5	68515-48-0
Propylene oxide	1 - 5	75-56-9
Carbon black	0.1 - 1	1333-86-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

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- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
- Skin contact** : Causes skin irritation.
- Ingestion** : Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation

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- Inhalation** : watering
redness
Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : May emit Hydrogen Chloride (HCl).
Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Special protective actions for fire-** : Promptly isolate the scene by removing all persons from the vicinity

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- fighters** of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency

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contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- | | |
|---|--|
| Protective measures | <ul style="list-style-type: none"> : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. |
| Advice on general occupational hygiene | <ul style="list-style-type: none"> : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| Conditions for safe storage, including any incompatibilities | <ul style="list-style-type: none"> : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a well-ventilated place. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. |

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

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Ingredient name	Exposure limits
Methyl ethyl ketone	<p>OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 590 mg/m³ 200 ppm Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a) irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 885 mg/m³ 300 ppm OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 590 mg/m³ 200 ppm NIOSH REL (1994-06-01) Time Weighted Average (TWA) 590 mg/m³ 200 ppm Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a) irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 885 mg/m³ 300 ppm ACGIH TLV (1994-09-01) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 590 mg/m³ 200 ppm TLV-STEL: Threshold Limit Value - Short Time Exposure Level 885 mg/m³ 300 ppm</p>
Benzene, methyl-	<p>OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 375 mg/m³ 100 ppm Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a) irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 560 mg/m³ 150 ppm OSHA PEL Z2 (1993-06-30) PEL: Permissible Exposure Level 200 ppm Ceiling 300 ppm Acceptable Maximum Peak (AMP) 500 ppm NIOSH REL (1994-06-01) Time Weighted Average (TWA) 375 mg/m³ 100 ppm Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a)</p>

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	<p>irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 560 mg/m³ 150 ppm ACGIH TLV (2006-11-17) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 20 ppm</p>
Methyl isobutyl ketone	<p>OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 205 mg/m³ 50 ppm Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a) irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 300 mg/m³ 75 ppm OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 410 mg/m³ 100 ppm NIOSH REL (1994-06-01) Time Weighted Average (TWA) 205 mg/m³ 50 ppm Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a) irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 300 mg/m³ 75 ppm ACGIH TLV (2009-11-30) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 20 ppm ACGIH TLV (1994-09-01) TLV-STEL: Threshold Limit Value - Short Time Exposure Level 75 ppm</p>
Propylene oxide	<p>OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 50 mg/m³ 20 ppm OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 240 mg/m³ 100 ppm NIOSH REL (1994-06-01) ACGIH TLV (1996-05-18) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 2 ppm</p>

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Carbon black	<p>OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 3.5 mg/m³</p> <p>OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 3.5 mg/m³</p> <p>NIOSH REL (1994-06-01) Time Weighted Average (TWA) 3.5 mg/m³</p> <p>Time Weighted Average (TWA)</p> <p>ACGIH TLV (2010-12-06) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 3 mg/m³ Form: Inhalable fraction</p>
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- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be

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	noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product., When there is a risk of ignition from static electricity, wear anti-static protective clothing., For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	: liquid [liquid]
Color	: BLACK
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: 4.4 °C (39.92 °F)
Burning time	: Not available.
Burning rate	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: Not available. Upper: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: Not available.
Solubility	: Not available.
Solubility in water	: Not available.
Partition coefficient: n-	: Not available.

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octanol/water

Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
SADT : Not available.
Viscosity : **Dynamic:** Not available.
Kinematic: Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Avoid contact with acetal homopolymers and acetyl homopolymers during processing.
Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Methyl ethyl ketone				
	LD50 Oral	Rat	2,737 mg/kg	-
	LC50 Inhalation	Rat	24 mg/l	8 h
	LD50 Dermal	Rabbit	6,480 mg/kg	-
Benzene, methyl-				
	LD50 Oral	Rat	636 mg/kg	-
	LC50 Inhalation	Rat	49 mg/l	4 h
Methyl isobutyl ketone				

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	LD50 Oral	Rat	2,080 mg/kg	-
	LD50 Oral	Rat	4,600 mg/kg	-
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich				
	LD50 Oral	Rat	10,000 mg/kg	-
Propylene oxide				
	LD50 Oral	Rat	380 mg/kg	-
	LC50 Inhalation	Rat	4000 ppm	4 h
Carbon black				
	LD50 Oral	Rat	15,400 mg/kg	-

Conclusion/Summary : Mixture. Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Methyl ethyl ketone	Skin - Moderate irritant	Rabbit		24 hrs	-
Benzene, methyl-	Skin - Mild irritant	Pig		24 hrs	-
	Skin - Mild irritant	Rabbit			-
	Skin - Moderate irritant	Rabbit			-
	Skin - Moderate irritant	Rabbit		24 hrs	-
	Eyes - Mild irritant	Rabbit			-
	Eyes - Severe irritant	Rabbit		24 hrs	-
	Eyes - Mild irritant	Rabbit		0.008 hrs	-
Methyl isobutyl ketone	Eyes - Moderate irritant	Rabbit		24 hrs	-
	Skin - Mild irritant	Rabbit		24 hrs	-
	Eyes - Severe irritant	Rabbit			-
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Eyes - Mild irritant	Rabbit			-
Propylene oxide	Eyes -	Rabbit		24 hrs	-

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	Moderate irritant				
	Skin - Moderate irritant	Rabbit			-
	Skin - Severe irritant	Rabbit		0.1 hrs	-
	Eyes - Severe irritant	Rabbit			-

Conclusion/Summary

Skin : Mixture.Not fully tested.
Eyes : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Sensitization**Conclusion/Summary**

Skin : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Mutagenicity

Conclusion/Summary : Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Classification

Product/ingredient name	OSHA	IARC	NTP
Benzene, methyl-		3	
Methyl isobutyl ketone		2B	
Propylene oxide		2B	
Carbon black		2B	

Reproductive toxicity

Conclusion/Summary : Mixture.Not fully tested.

Teratogenicity

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
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Methyl ethyl ketone	Category 3		Narcotic effects
Methyl isobutyl ketone	Category 3		Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
- Skin contact** : Causes skin irritation.
- Ingestion** : Harmful if swallowed., Can cause central nervous system (CNS) depression., Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

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Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Mixture. Not fully tested.

General : No known significant effects or critical hazards.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	1,675.3 mg/kg
Route	ATE value
Inhalation (gases)	186,291.1 ppm
Route	ATE value
Inhalation (vapors)	63.29 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Methyl ethyl ketone			
	Acute LC50 3,220,000 µg/l Fresh water	Fish - Fathead minnow	96 h
	Acute LC50 5,600 mg/l Fresh water	Fish - Western mosquitofish	96 h
	Acute EC50 5,091,000 µg/l Fresh water	Aquatic invertebrates. Water flea	48 h

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	Acute EC50 > 500,000 µg/l Marine water	Aquatic plants - Diatom	96 h
	Acute EC50 > 500 mg/l Fresh water	Aquatic plants - Green algae	96 h
Benzene, methyl-			
	Acute LC50 6,780 µg/l Fresh water	Fish - Rainbow trout,donaldson trout	96 h
	Acute LC50 5,800 µg/l Fresh water	Fish - Rainbow trout,donaldson trout	96 h
	Acute LC50 5,500 µg/l Fresh water	Fish - Coho salmon,silver salmon	96 h
	Acute LC50 6,410 µg/l Marine water	Fish - Pink salmon	96 h
	Acute EC50 6,780 µg/l Fresh water	Fish - Rainbow trout,donaldson trout	96 h
	Acute EC50 19,600 µg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 6,000 µg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute LC50 86,300 µg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 6,560 µg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 6,880 µg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 12,500 µg/l Fresh water	Aquatic plants - Green algae	72 h
	Chronic NOEC 2 mg/l Fresh water	Aquatic invertebrates. Water flea	21 d
	Chronic NOEC 1,000 µg/l Fresh water	Aquatic invertebrates. Water flea	21 d
Methyl isobutyl ketone			
	Acute LC50 505,000 µg/l Fresh water	Fish - Fathead minnow	96 h
	Acute LC50 537,000 µg/l Fresh water	Fish - Fathead minnow	96 h
	Acute LC50 540,000 µg/l Fresh water	Fish - Fathead minnow	96 h
	Chronic NOEC 168 mg/l Fresh water	Fish - Fathead minnow	33 d
	Chronic NOEC 78 mg/l Fresh water	Aquatic invertebrates. Water flea	21 d
Propylene oxide			
	Acute LC50 141 mg/l Fresh water	Fish - Western	96 h

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		mosquitofish	
	Acute LC50 215 mg/l Fresh water	Fish - Bluegill	96 h
	Acute LC50 89 mg/l Marine water	Fish - Striped mullet	96 h
Carbon black			
	Acute EC50 37.563 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute LC50 61.547 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Methyl ethyl ketone	0.29	-	low
Benzene, methyl-	2.73	90.00	low
Methyl isobutyl ketone	1.9	-	high
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	8.8	3.00	low
Propylene oxide	1	1.00	low

Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be

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disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Listed

Ingredient	CAS #	Status	Reference number
Methyl ethyl ketone	78-93-3	Listed	
Benzene, methyl-	108-88-3	Listed	
Methyl isobutyl ketone	108-10-1	Listed	

Section 14. Transport information

U.S. DOT Classification	
Proper Shipping Name:	Flammable liquids, n.o.s.
Technical Name:	butanone,toluene
Hazard Class / Division	3
UN Number	UN1993
Packing Group	II
Label Required	3
ICAO/IATA	Consult mode specific transport rules
IMO/IMDG (maritime)	Consult mode specific transport rules

Section 15. Regulatory information

U.S. Federal regulations	: United States - TSCA 12(b) - Chemical export notification: None of the components are listed. United States - TSCA 4(a) - Final Test Rules: Listed Methyl isobutyl ketone 1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich
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United States - TSCA 4(a) - ITC Priority list: Not listed
United States - TSCA 4(a) - Proposed test rules: Not listed
United States - TSCA 4(f) - Priority risk review: Not listed
United States - TSCA 5(a)2 - Final significant new use rules: Not listed
United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed
United States - TSCA 5(e) - Substances consent order: Not listed
United States - TSCA 6 - Final risk management: Not listed
United States - TSCA 6 - Proposed risk management: Not listed
United States - TSCA 8(a) - Chemical risk rules: Not listed
United States - TSCA 8(a) - Dioxin/Furane precursor: Not listed
United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined
United States - TSCA 8(a) - Preliminary assessment report (PAIR): Not listed
United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed
United States - TSCA 8(d) - Health and safety studies: Not listed
United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Benzene, methyl-Zinc stearate

United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Listed
United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed
United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Listed Propylene oxide

United States - Department of commerce - Precursor chemical: Not listed

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Listed
Clean Air Act Section 602 Class I Substances : Not listed
Clean Air Act Section 602 Class II Substances : Not listed
DEA List I Chemicals (Precursor Chemicals) : Not listed
DEA List II Chemicals (Essential Chemicals) : Listed

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US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	RQ for component
Propylene oxide	75-56-9	100 lb(s) 45.4 kg
Benzene, methyl-	108-88-3	1,000 lb(s) 454 kg 454 kg 1,000 lb(s)

SARA 311/312

Classification : Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Classification
Methyl ethyl ketone	30 - 60	F, AH
Benzene, methyl-	10 - 30	F, AH
Methyl isobutyl ketone	10 - 30	F, AH
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	1 - 5	AH
Propylene oxide	1 - 5	F, AH, CH
Carbon black	0.1 - 1	CH

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Benzene, methyl-	108-88-3	10 - 30
	Methyl isobutyl ketone	108-10-1	10 - 30
	Propylene oxide	75-56-9	1 - 5
Supplier notification	Benzene, methyl-	108-88-3	10 - 30

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	Methyl isobutyl ketone	108-10-1	10 - 30
	Propylene oxide	75-56-9	1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations**Massachusetts**

- : The following components are listed:
Methyl ethyl ketone
Benzene, methyl-
Methyl isobutyl ketone
Propylene oxide

New York

- : The following components are listed:
Methyl ethyl ketone
Benzene, methyl-
Methyl isobutyl ketone
Propylene oxide

New Jersey

- : The following components are listed:
Methyl ethyl ketone
Benzene, methyl-
Methyl isobutyl ketone
Propylene oxide
Carbon black

Pennsylvania

- : The following components are listed:
Methyl ethyl ketone

Benzene, methyl-

Methyl isobutyl ketone

Propylene oxide

Carbon black

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

United States inventory (TSCA 8b) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

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International regulations

International lists	:	Australia inventory (AICS): All components are listed or exempted. Taiwan inventory (CSNN): All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted. Japan inventory: Not determined. China inventory (IECSC): All components are listed or exempted. Korea inventory: All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted.
Chemical Weapons Convention List Schedule I Chemicals	:	Not listed
Chemical Weapons Convention List Schedule II Chemicals	:	Not listed
Chemical Weapons Convention List Schedule III Chemicals	:	Not listed

Section 16. Other information

History

Date of printing	:	03/31/2015
Date of issue/Date of revision	:	03/30/2015
Date of previous issue	:	03/12/2014
Version	:	1.4

Key to abbreviations

:	ATE = Acute Toxicity Estimate
:	BCF = Bioconcentration Factor
:	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
:	IATA = International Air Transport Association
:	IBC = Intermediate Bulk Container
:	IMDG = International Maritime Dangerous Goods
:	LogPow = logarithm of the octanol/water partition coefficient
:	MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
:	UN = United Nations

References

:	Not available.
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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-

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named supplier, nor any of its subsidiaries, assumes any liability whatsoever 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 hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.