



## Safety Data Sheet

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.  
P261 Avoid breathing 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:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.  
P332 + P313 If skin irritation occurs: 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 to extinguish.

### 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.

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Hazardous components

CAS-No.	Chemical Name	Weight %
67-64-1	Acetone	70 - 90
71-36-3	1-Butanol	10 - 20
108-83-8	Diisobutyl ketone	1 - 5
111-76-2	2-Butoxy ethanol	1 - 5
19549-80-5	2-Heptanone, 4,6-dimethyl-	1 - 5

Any Concentration shown as a range is due to batch variation.

## SECTION 4. FIRST AID MEASURES

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- General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.  
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 : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Continue rinsing eyes during transport to hospital.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.  
Take victim immediately to hospital.
- 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.

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### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon oxides
- 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.  
Use a water spray to cool fully closed containers.
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Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.  
Use personal protective equipment.

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with 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).

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### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.  
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

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.  
To avoid spills during handling keep bottle on a metal tray.  
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.

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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	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
		TWA	250 ppm 590 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m <sup>3</sup>	OSHA Z-1
		TWA	750 ppm 1,800 mg/m <sup>3</sup>	OSHA P0
		STEL	1,000 ppm 2,400 mg/m <sup>3</sup>	OSHA P0
71-36-3	1-Butanol	TWA	20 ppm	ACGIH
		C	50 ppm 150 mg/m <sup>3</sup>	NIOSH REL
		TWA	100 ppm 300 mg/m <sup>3</sup>	OSHA Z-1
		C	50 ppm 150 mg/m <sup>3</sup>	OSHA P0
108-83-8	Diisobutyl ketone	TWA	25 ppm	ACGIH
		TWA	25 ppm 150 mg/m <sup>3</sup>	NIOSH REL
		TWA	50 ppm 290 mg/m <sup>3</sup>	OSHA Z-1
		TWA	25 ppm 150 mg/m <sup>3</sup>	OSHA P0
111-76-2	2-Butoxy ethanol	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m <sup>3</sup>	NIOSH REL
		TWA	50 ppm 240 mg/m <sup>3</sup>	OSHA Z-1
		TWA	25 ppm 120 mg/m <sup>3</sup>	OSHA P0

#### Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air

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purifying respirators may not provide adequate protection.

### 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.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : Clear, Colorless

Odour : acetone-like

Odour Threshold : No data available

pH : No data available

Freezing Point : No data available

Boiling Point : No data available

Flash point : < -18 °C (< -0.40 °F)  
Method: Tag closed cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : > 1(Air = 1.0)

Relative density : 0.797 @ 25 °C (77 °F)  
Reference substance: (water = 1)

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Density	: 0.797 g/cm <sup>3</sup> @ 25 °C (77 °F)
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available

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### 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	: Vapours may form explosive mixture with air.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Acids aluminum Amines Bases halogens Oxidizing agents

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

##### Components:

###### **71-36-3:**

Acute oral toxicity : LD<sub>50</sub> (Rat): 790 mg/kg  
Assessment: The component/mixture is moderately toxic after single ingestion.

###### **111-76-2:**

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Acute oral toxicity : LD50 (Rat): 745 mg/kg  
Assessment: The component/mixture is moderately toxic after single ingestion.

## Skin corrosion/irritation

### Components:

#### **71-36-3:**

Species: Rabbit  
Result: Irritating to skin.

## Serious eye damage/eye irritation

### Components:

#### **67-64-1:**

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

#### **71-36-3:**

Species: Rabbit  
Result: Risk of serious damage to eyes.

#### **111-76-2:**

Species: Rabbit  
Result: Irritating to eyes.

## Germ cell mutagenicity

### Components:

#### **19549-80-5:**

Genotoxicity in vitro : Test Type: Mammalian cell gene mutation assay  
Species: Chinese hamster ovary (CHO)  
Metabolic activation: with and without metabolic activation  
Result: negative  
Remarks: Information given is based on data obtained from similar substances.

: Test Type: Chromosome aberration test in vitro  
Species: Rat liver  
Metabolic activation: Without metabolic activation  
Result: negative  
Remarks: Information given is based on data obtained from similar substances.

## Carcinogenicity

### **IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### **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.

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**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.

**ACGIH** Confirmed animal carcinogen with unknown relevance to humans  
111-76-2 2-Butoxy ethanol

### STOT - single exposure

#### Components:

##### **67-64-1:**

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

##### **71-36-3:**

Target Organs: Respiratory system

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Target Organs: Central nervous system

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

##### **108-83-8:**

Exposure routes: Inhalation

Target Organs: Respiratory system

Assessment: May cause respiratory irritation., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

##### **19549-80-5:**

Target Organs: Respiratory system

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

### 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.

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **108-83-8:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 30 mg/l  
Exposure time: 96 h  
Test Type: flow-through test
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 37.2 mg/l  
Exposure time: 48 h
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): 46.9 mg/l  
End point: Growth rate  
Exposure time: 72 h  
Test Type: static test
- Acute aquatic toxicity- Assessment : Harmful to aquatic life.

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

#### Product:

- Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances  
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
- Additional ecological information : No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

- Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
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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

**DOT (Department of Transportation):**  
UN1263, PAINT RELATED MATERIAL, 3, II

**IATA (International Air Transport Association):**  
UN1263, PAINT RELATED MATERIAL, 3, II

**IMDG (International Maritime Dangerous Goods):**  
UN1263, PAINT RELATED MATERIAL, 3, II, Flash Point:< -18 °C(< -0.40 °F)

## SECTION 15. REGULATORY INFORMATION

**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)
Acetone	67-64-1	5000	6138
1-Butanol	71-36-3	5000	44613

#### 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  
Immediate (Acute) Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

71-36-3                    1-Butanol  
111-76-2                2-Butoxy ethanol

#### Clean Air Act

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This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

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

67-64-1	Acetone
71-36-3	1-Butanol
111-76-2	2-Butoxy ethanol

## Clean Water Act

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

71-43-2	**Benzene
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The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

71-43-2	**Benzene
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This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

## US State Regulations

### Massachusetts Right To Know

67-64-1	Acetone	70 - 90 %
71-36-3	1-Butanol	10 - 20 %
108-83-8	Diisobutyl ketone	1 - 5 %
111-76-2	2-Butoxy ethanol	1 - 5 %
71-43-2	**Benzene	0 - 0.1 %

### Pennsylvania Right To Know

67-64-1	Acetone	70 - 90 %
71-36-3	1-Butanol	10 - 20 %
108-83-8	Diisobutyl ketone	1 - 5 %
111-76-2	2-Butoxy ethanol	1 - 5 %

### New Jersey Right To Know

67-64-1	Acetone	70 - 90 %
71-36-3	1-Butanol	10 - 20 %
108-83-8	Diisobutyl ketone	1 - 5 %
111-76-2	2-Butoxy ethanol	1 - 5 %
19549-80-5	2-Heptanone, 4,6-dimethyl-	1 - 5 %

### California Prop 65

	WARNING! This product contains a chemical known to the State of California to cause cancer.
71-43-2	**Benzene
	WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
71-43-2	**Benzene

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

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL
AICS	: Not in compliance with the inventory

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NZIoC : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

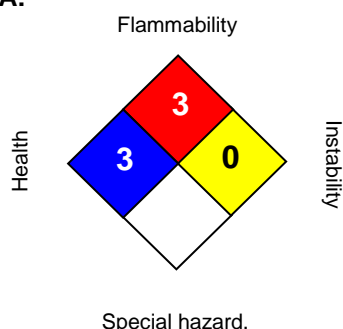
PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

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

## SECTION 16. OTHER INFORMATION

### NFPA:



### HMIS III:

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>3</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

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.

**Version** : 2.0

**Revision Date** : 11/28/2016

**Legacy SDS:** : R0354895

**Material number:**

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

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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%