

# Accelerator 833

## Safety Data Sheet

### SECTION 1: Identification

#### 1.1. Product identifier

Product name : Accelerator 833

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Manufacturing

#### 1.3. Supplier

Zaclon LLC  
2981 Independence Road  
Cleveland, OH 44115  
T 800-356-7327

#### 1.4. Emergency telephone number

Emergency number : Chemtrec 1 800 424 9300

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

##### GHS-US/CAN classification

Serious eye damage/eye irritation Category 2A H319  
Skin sensitization, Category 1 H317  
Carcinogenicity Category 2 H351

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US/CAN labeling

Hazard pictograms :



Signal word :

Warning

Hazard statements :

H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H351 - Suspected of causing cancer

Precautionary statements :

P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 - IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 - IF exposed or concerned: Get medical advice/attention.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity

No data available

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

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Name	Product identifier	%	GHS-CAN classification	GHS US classification
Butanal, reaction products with butylamine	(CAS-No.) 68411-19-8	> 99	Not classified	Not classified
Aniline	(CAS-No.) 62-53-3	< 1	Flam. Liq. 4, H227 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	Flam. Liq. 4, H227 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Butyraldehyde	(CAS-No.) 123-72-8	< 1	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Eye Irrit. 2A, H319	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Eye Irrit. 2A, H319

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove to fresh air immediately. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.
- First-aid measures after skin contact : Immediately wash the affected area with plenty of soap and water for a minimum of 15 minutes. Remove any contaminated clothing. Get immediate medical attention.
- First-aid measures after eye contact : Flush eyes immediately with copious amounts of water for at least 15 minutes. Keep eyelids apart while irrigating the eyes. Get medical attention immediately.
- First-aid measures after ingestion : Do not induce vomiting. Give large quantities of water or milk. Call a physician. Never give anything by mouth to an unconscious person.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : No potential inhalation effects anticipated.
- Symptoms/injuries after skin contact : May cause an allergic skin reaction.
- Symptoms/injuries after eye contact : Causes serious eye irritation.
- Symptoms/injuries after ingestion : Not considered a likely route of exposure under normal product handling conditions. May cause gastrointestinal harm if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Use carbon dioxide (CO<sub>2</sub>), dry chemical.
- Unsuitable extinguishing media : None.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : None known.
- Explosion hazard : None known.

#### 5.3. Advice for firefighters

- Protection during firefighting : Firefighters should wear full protective gear.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

No additional information available

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

- For containment : Stop the flow of material, if this is without risk.
- Methods for cleaning up : Confine spill and soak up with absorbent. Place in an approved container and dispose in accordance with local, state and federal regulations.

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### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation/exhaustion at the workplace. Avoid contact with skin and eyes. Do not allow product to enter sewage system or water bodies.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly sealed and in the original container.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Aniline (62-53-3)	
<b>Canada (Alberta) - Occupational Exposure Limits</b>	
OEL TWA (mg/m <sup>3</sup> )	7.6 mg/m <sup>3</sup>
OEL TWA (ppm)	2 ppm
<b>Canada (Quebec) - Occupational Exposure Limits</b>	
VEMP (mg/m <sup>3</sup> )	7.6 mg/m <sup>3</sup>
VEMP (ppm)	2 ppm
<b>Canada (British Columbia) - Occupational Exposure Limits</b>	
OEL TWA (ppm)	2 ppm
<b>Canada (Manitoba) - Occupational Exposure Limits</b>	
OEL TWA (ppm)	2 ppm
<b>Canada (New Brunswick) - Occupational Exposure Limits</b>	
OEL TWA (mg/m <sup>3</sup> )	7.6 mg/m <sup>3</sup>
OEL TWA (ppm)	2 ppm
<b>Canada (Newfoundland and Labrador) - Occupational Exposure Limits</b>	
OEL TWA (ppm)	2 ppm
<b>Canada (Nova Scotia) - Occupational Exposure Limits</b>	
OEL TWA (ppm)	2 ppm
<b>Canada (Nunavut) - Occupational Exposure Limits</b>	
OEL TWA (ppm)	2 ppm
OEL STEL (ppm)	4 ppm
<b>Canada (Northwest Territories) - Occupational Exposure Limits</b>	
OEL TWA (ppm)	2 ppm
OEL STEL (ppm)	4 ppm
<b>Canada (Ontario) - Occupational Exposure Limits</b>	
OEL TWA (ppm)	2 ppm
<b>Canada (Prince Edward Island) - Occupational Exposure Limits</b>	
OEL TWA (ppm)	2 ppm
<b>Canada (Saskatchewan) - Occupational Exposure Limits</b>	
OEL TWA (ppm)	2 ppm
OEL STEL (ppm)	4 ppm
<b>Canada (Yukon) - Occupational Exposure Limits</b>	
OEL TWA (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
OEL TWA (ppm)	5 ppm
OEL STEL (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
OEL STEL (ppm)	5 ppm

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Aniline (62-53-3)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (ppm)	2 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route, Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA - ACGIH - Biological Exposure Indices	
Biological Exposure Indices (BEI)	Parameter: Aniline with hydrolysis - Medium: urine - Sampling time: end of shift (nonquantitative) Parameter: Aniline released from hemoglobin - Medium: blood - Sampling time: end of shift (nonquantitative) 50 mg/l Parameter: p-Aminophenol with hydrolysis - Medium: urine - Sampling time: end of shift (background, nonspecific, semi-quantitative)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	5 ppm
Limit value category (OSHA)	prevent or reduce skin absorption

### 8.2. Appropriate engineering controls

Appropriate engineering controls : General (mechanical) room ventilation is expected to be satisfactory for normal handling.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Use impervious gloves.

#### Eye protection:

Wear chemical safety goggles or equivalent.

#### Skin and body protection:

Wear suitable working clothes

#### Respiratory protection:

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Translucent.
Color	: Reddish amber
Odor	: Aromatic
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: < 1
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 96 °C (>205°F)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity	: 0.86 @25°C
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available

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Oxidizing properties : No data available  
Explosive limits : No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

### 10.3. Possibility of hazardous reactions

Will not occur.

### 10.4. Conditions to avoid

None.

### 10.5. Incompatible materials

Reacts with oxidizing agents.

### 10.6. Hazardous decomposition products

Not determined.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

<b>Aniline (62-53-3)</b>	
LD50 oral rat	440 mg/kg
LD50 dermal rat	442 mg/kg
LC50 inhalation rat (mg/l)	1.82 mg/l/4h
ATE CA (oral)	440 mg/kg body weight
ATE CA (Dermal)	442 mg/kg body weight
ATE CA (vapours)	1.82 mg/l/4h
ATE CA (dust,mist)	1.82 mg/l/4h

<b>Butyraldehyde (123-72-8)</b>	
LD50 oral rat	4240 mg/kg
LD50 dermal rabbit	1370 mg/kg
LC50 inhalation rat (ppm)	16400 ppm/4h
ATE CA (oral)	4240 mg/kg body weight
ATE CA (Dermal)	1370 mg/kg body weight
ATE CA (Gases)	16400 ppmV/4h

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitization : May cause an allergic skin reaction.  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

<b>Aniline (62-53-3)</b>	
STOT-single exposure	Causes damage to organs.

: Not classified

STOT-repeated exposure

<b>Aniline (62-53-3)</b>	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

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Aspiration hazard : Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Aniline (62-53-3)	
LC50 fish 1	68.4 – 83.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	40.7 – 59.1 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
Partition coefficient n-octanol/water (Log Pow)	0.9

Butyraldehyde (123-72-8)	
LC50 fish 1	13.0 – 13.8 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	14.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Partition coefficient n-octanol/water (Log Pow)	0.79 (at 25 °C)

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

Aniline (62-53-3)	
Partition coefficient n-octanol/water (Log Pow)	0.9

Butyraldehyde (123-72-8)	
Partition coefficient n-octanol/water (Log Pow)	0.79 (at 25 °C)

#### 12.4. Mobility in soil

Aniline (62-53-3)	
Partition coefficient n-octanol/water (Log Pow)	0.9

Butyraldehyde (123-72-8)	
Partition coefficient n-octanol/water (Log Pow)	0.79 (at 25 °C)

#### 12.5. Other adverse effects

Ozone : Not classified

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

### SECTION 14: Transport information

#### 14.1. Basic shipping description

In accordance with TDG

#### Transportation of Dangerous Goods

Not regulated for transport

#### 14.2. Transport information/DOT

#### Department of Transport

Not regulated for transport

### SECTION 15: Regulatory information

#### 15.1. Canada National regulations

Butanal, reaction products with butylamine (68411-19-8)	
Listed on the Canadian DSL (Domestic Substances List)	

Aniline (62-53-3)	
Listed on the Canadian DSL (Domestic Substances List)	

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### Butyraldehyde (123-72-8)

Listed on the Canadian DSL (Domestic Substances List)

### 15.2. US Federal regulations

#### Butanal, reaction products with butylamine (68411-19-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Aniline (62-53-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on the United States SARA Section 302

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	5000 lb
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SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb
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SARA Section 313 - Emission Reporting	1 %
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#### Butyraldehyde (123-72-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting	1 %
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### 15.3. US State regulations

#### Aniline (62-53-3)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	100 µg/day

#### Aniline (62-53-3)

U.S. - Massachusetts - Right To Know List  
 U.S. - Minnesota - Hazardous Substance List  
 U.S. - New Jersey - Right to Know Hazardous Substance List  
 U.S. - Pennsylvania - RTK (Right to Know) List

#### Butyraldehyde (123-72-8)

U.S. - Massachusetts - Right To Know List  
 U.S. - Minnesota - Hazardous Substance List  
 U.S. - New Jersey - Right to Know Hazardous Substance List  
 U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 4	Flammable liquids Category 4
Muta. 2	Germ cell mutagenicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
H225	Highly flammable liquid and vapour
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction

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H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*