

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2026-03-25

Replaces version of: 2023-12-12

## SECTION 1: Identification

### 1.1 Product identifier

Product name **Annihilator**  
Product number 2911FX

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

Relevant identified uses  
Floor-stripper  
Uses advised against  
All uses other than those indicated on the product label and technical data sheet.

### 1.3 Details of the supplier of the safety data sheet

Essential Industries, Inc.  
28391 Essential Road  
P.O. Box 12  
Merton WI 53056  
United States

Telephone: 262-538-1122  
Website: www.essind.com

### 1.4 Emergency telephone number

Emergency information service 800-843-6174 (24 hours)

## SECTION 2: Hazard(s) identification

### 2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Skin Corr. 1.  
Eye Dam. 1.  
Flam. Liq. 3.

### 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word Danger

- Pictograms



- Hazard statements  
Flammable liquid and vapor.  
Causes severe skin burns and eye damage.

**- Precautionary statements**

- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  - Keep container tightly closed.
  - Ground/bond container and receiving equipment.
  - Use explosion-proof electrical/ventilating/lighting equipment.
  - Use only non-sparking tools.
  - Take precautionary measures against static discharge.
  - Do not breathe dusts or mists.
  - Wear protective gloves/eye protection/face protection.
  - If swallowed: Rinse mouth. Do NOT induce vomiting.
  - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - 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.
  - Immediately call a poison center/doctor.
  - Specific treatment (see on this label).
  - Wash contaminated clothing before reuse.
  - In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
  - Store in a well-ventilated place. Keep cool.
  - Store locked up.
  - Dispose of contents/container to industrial combustion plant.
- Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**2.3 Other hazards**  
of no significance

**SECTION 3: Composition/information on ingredients**

**3.1 Substance / Mixture**  
Mixture

**3.2 Mixtures**

Description of the mixture

Name of substance	CAS No	Wt%	Classification acc. to GHS
2-butoxyethanol	111-76-2	25 - < 50	Acute Tox. 4 / H302 Acute Tox. 4 / H312 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Flam. Liq. 4 / H227
2-aminoethanol	141-43-5	5 - < 10	Acute Tox. 4 / H302 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Flam. Liq. 4 / H227
Isopropyl Alcohol	67-63-0	1 - < 5	Acute Tox. 4 / H332 Eye Irrit. 2 / H319 STOT SE 3 / H336 Flam. Liq. 2 / H225
Sodium Xylene Sulfonate	1300-72-7	1 - < 5	Acute Tox. 4 / H332 Eye Irrit. 2A / H319
Acetylenic diol (proprietary)	Trade Secret	< 1	Acute Tox. 4 / H302 Eye Irrit. 2A / H319 Skin Sens. 1B / H317 STOT RE 2 / H373

**Remarks**

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. For full text of abbreviations: see SECTION 16.

## SECTION 4: First-aid measures

### 4.1 Description of first-aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

Water jet

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

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

#### Hazardous combustion products

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

#### Special protective equipment for firefighters

Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

## SECTION 6: Accidental release measures

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

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

## 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it in accordance with all local, state and federal regulations.

## 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

## 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

# SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.

- Handling of incompatible substances or mixtures

Do not mix with acids.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

## 7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

Environmental Controls

Protect against external exposure, such as frost

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- Ventilation requirements  
Use local and general ventilation. Ground/bond container and receiving equipment.
- Packaging compatibilities  
Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Notation	Source
US	2-butoxyethanol	111-76-2	TLV®	20							ACGIH® 2024
US	2-butoxyethanol	111-76-2	REL	5 (10 h)	24 (10 h)					H	NIOSH REL
US	2-butoxyethanol	111-76-2	PEL	50	240					H	29 CFR 1910.10 00
US	2-butoxyethanol (EGBE) (glycol monobutyl ether)	111-76-2	PEL (CA)	20	97					H	Cal/OSH A PEL
US	ethanolamine	141-43-5	REL	3 (10 h)	8 (10 h)	6	15				NIOSH REL
US	ethanolamine	141-43-5	TLV®	3		6					ACGIH® 2024
US	ethanolamine	141-43-5	PEL	3	6						29 CFR 1910.10 00
US	ethanolamine (2-aminoethanol)	141-43-5	PEL (CA)	3	8	6	15				Cal/OSH A PEL
US	2-propanol	67-63-0	TLV®	200		400					ACGIH® 2024
US	isopropyl alcohol	67-63-0	PEL (CA)	400	980	500	1,225				Cal/OSH A PEL
US	isopropyl alcohol	67-63-0	REL	400 (10 h)	980 (10 h)	500	1,225				NIOSH REL
US	isopropyl alcohol	67-63-0	PEL	400	980						29 CFR 1910.10 00

#### Notation

- Ceiling-C ceiling value is a limit value above which exposure should not occur
- H absorbed through the skin
- STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
- TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

**Eye/face protection**

Wear eye/face protection.

**Skin protection**

**- Hand protection**

Wear suitable gloves. Chemical protection gloves are suitable. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**- Other protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

**Respiratory protection**

In case of inadequate ventilation wear appropriate respiratory protection.

**Environmental exposure controls**

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

Physical state	liquid
Color	colorless
Odor	Butyl
Melting point/freezing point	0 °C (32 °F)
Boiling point or initial boiling point and boiling range	100 °C (212 °F)
Flammability	flammable liquid in accordance with GHS criteria
Lower and upper explosion limit	not determined
Flash point	53 °C (127.4 °F) (c.c.)
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	11.5 – 12.5 8.8 – 11.5 (in aqueous solution: 2 wt%) (base)
Solubility(ies)	not determined

**Partition coefficient**

Partition coefficient n-octanol/water (log value)	this information is not available
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Vapor pressure	<4 kPa at 20 °C
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**Density and/or relative density**

Density	1 g/cm <sup>3</sup>
Relative vapour density	information on this property is not available

Other safety parameters

Lower explosion limit (LEL)	not determined
Upper explosion limit (UEL)	not determined
Decomposition temperature	not determined
VOC	57%

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

### 10.5 Incompatible materials

Oxidizers

Release of flammable materials with:

Light metals (due to the release of hydrogen in an acid/alkaline medium)

### 10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### **Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)**

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful if swallowed, in contact with skin or if inhaled.

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
2-butoxyethanol	111-76-2	oral	1,414 mg/kg
2-butoxyethanol	111-76-2	dermal	1,100 mg/kg
2-butoxyethanol	111-76-2	inhalation: vapor	11 mg/l/4h
2-aminoethanol	141-43-5	oral	1,089 mg/kg
2-aminoethanol	141-43-5	dermal	2,504 mg/kg
Isopropyl Alcohol	67-63-0	inhalation: vapor	12.5 mg/l/4h
Sodium Xylene Sulfonate	1300-72-7	oral	>2,000 mg/kg
Sodium Xylene Sulfonate	1300-72-7	dermal	>2,000 mg/kg
Sodium Xylene Sulfonate	1300-72-7	inhalation: dust/mist	>2.4 mg/l/4h
Acetylenic diol (proprietary)	Trade Secret	oral	>500 mg/kg
Acetylenic diol (proprietary)	Trade Secret	dermal	>2,000 mg/kg

Acute toxicity of components

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
2-butoxyethanol	111-76-2	oral	LD50	1,414 mg/kg	guinea pig
2-aminoethanol	141-43-5	oral	LD50	1,089 mg/kg	rat
2-aminoethanol	141-43-5	dermal	LD50	2,504 mg/kg	rabbit
Isopropyl Alcohol	67-63-0	oral	LD50	5,840 mg/kg	unknown
Isopropyl Alcohol	67-63-0	dermal	LD50	13,900 mg/kg	unknown
Isopropyl Alcohol	67-63-0	inhalation: vapor	LC50	25 mg/l/1h	unknown
Sodium Xylene Sulfonate	1300-72-7	inhalation: dust/mist	LC50	>2,400 mg/m <sup>3</sup> /4h	rat
Sodium Xylene Sulfonate	1300-72-7	oral	LD50	>2,000 mg/kg	rat
Sodium Xylene Sulfonate	1300-72-7	oral	LD50	>7,000 mg/kg	rat
Sodium Xylene Sulfonate	1300-72-7	dermal	LD50	>2,000 mg/kg	rabbit
Acetylenic diol (proprietary)	Trade Secret	oral	LD50	>500 mg/kg	rat
Acetylenic diol (proprietary)	Trade Secret	dermal	LD50	>2,000 mg/kg	rat

**Skin corrosion/irritation**

Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Respiratory or skin sensitization**

Shall not be classified as a respiratory or skin sensitizer.

**Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

**Carcinogenicity**

Shall not be classified as carcinogenic.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans			
Name of substance	CAS No	Classification	Number
2-butoxyethanol	111-76-2	3	
Isopropyl Alcohol	67-63-0	3	

Legend

3 Not classifiable as to carcinogenicity in humans

**Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

**Specific target organ toxicity - single exposure**

Shall not be classified as a specific target organ toxicant (single exposure).

**Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

**Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-butoxyethanol	111-76-2	LC50	1,474 mg/l	fish	96 h
2-butoxyethanol	111-76-2	EC50	1,550 mg/l	aquatic invertebrates	48 h
2-butoxyethanol	111-76-2	ErC50	1,840 mg/l	algae	72 h
2-aminoethanol	141-43-5	LC50	349 mg/l	fish	96 h
2-aminoethanol	141-43-5	EC50	27.04 mg/l	aquatic invertebrates	48 h
2-aminoethanol	141-43-5	ErC50	2.8 mg/l	algae	72 h
Isopropyl Alcohol	67-63-0	LC50	10,000 mg/l	fish	96 h
Sodium Xylene Sulfonate	1300-72-7	LC50	1,766 mg/l	daphnia	48 h
Sodium Xylene Sulfonate	1300-72-7	LC50	7,960 mg/l	fathead minnow (Pimephales promelas)	96 h
Sodium Xylene Sulfonate	1300-72-7	EC50	>1,020 mg/l	daphnia	48 h
Acetylenic diol (proprietary)	Trade Secret	LC50	42 mg/l	fish	96 h
Acetylenic diol (proprietary)	Trade Secret	EC50	91 mg/l	aquatic invertebrates	48 h
Acetylenic diol (proprietary)	Trade Secret	ErC50	39 mg/l	algae	48 h

Aquatic toxicity (chronic) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-butoxyethanol	111-76-2	EC50	297 mg/l	aquatic invertebrates	21 d
2-aminoethanol	141-43-5	EC50	2.5 mg/l	aquatic invertebrates	21 d
Acetylenic diol (proprietary)	Trade Secret	EC50	840 mg/l	microorganisms	3 h

**12.2 Persistence and degradability**

Data are not available.

**12.3 Bioaccumulative potential**

Data are not available.

**12.4 Mobility in soil**

Data are not available.

**12.5 Results of PBT and vPvB assessment**

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0.1\%$ .

**12.6 Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0.1\%$ .

**12.7 Other adverse effects**

Data are not available.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Waste treatment-relevant information

Solvent reclamation/regeneration.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**SECTION 14: Transport information**

**Information for each of the UN Model Regulations**

**Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information**

Particulars in the shipper's declaration UN2924, Flammable liquid, corrosive, n.o.s., (Isopropyl Alcohol, 2-aminoethanol, solution), 3 (8), III

Danger label(s) 3+8



ERG No 132

Limited quantities (LQ) 5L

**International Maritime Dangerous Goods Code (IMDG) - Additional information**

Particulars in the shipper's declaration UN2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S., (Isopropyl Alcohol, 2-aminoethanol), 3 (8), III, 53°C c.c.

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Marine pollutant -  
Danger label(s) 3+8



Limited quantities (LQ) 5 L

**International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information**

Particulars in the shipper's declaration UN2924, Flammable liquid, corrosive, n.o.s., (Isopropyl Alcohol, 2-aminoethanol), 3 (8), III

Danger label(s) 3+8



Limited quantities (LQ) 1 L

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations specific for the product in question**

**National regulations**

**Toxic Substance Control Act (TSCA)** all ingredients are listed (ACTIVE) or exempt from listing

**DSL/NDSL (Canada)** all ingredients are listed on or exempt from the DSL

**Superfund Amendment and Reauthorization Act (SARA TITLE III )**

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings			
Name of substance	CAS No	Remarks	Effective date
2-butoxyethanol		R - (OCH <sub>2</sub> CH <sub>2</sub> ) <sub>n</sub> - OR' Where: n = 1, 2, or 3; R = alkyl C7 or less; or R = phenyl or alkyl substituted phenyl; R' = H or alkyl C7 or less; or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.	1995-01-01

**Clean Air Act**

none of the ingredients are listed

**California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987**

Proposition 65 List of chemicals			
Name acc. to inventory	CAS No	Remarks	Type of the toxicity
diethanolamine	111-42-2		cancer

**Industry or sector specific available guidance(s)**

## NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	none
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

## NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

## SECTION 16: Other information, including date of preparation or last revision

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH® 2024	From ACGIH®, 2024 TLVs® and BEIs® Book. Copyright 2024. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: <a href="http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement">http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement</a>
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ED	Endocrine disruptor
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
ERG No	Emergency Response Guidebook - Number

Abbr.	Descriptions of used abbreviations
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
ppm	Parts per million
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
TLV®	Threshold Limit Values
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.  
 Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG).  
 Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties: The classification is based on the tested mixture and/or formulator knowledge.  
 Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H225	Highly flammable liquid and vapor.
H227	Combustible liquid.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

### Disclaimer

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