

Orange Blast

Version number: GHS 2.0
Replaces version of: 2018-05-25 (GHS 1)

Revision: 2019-04-03

SECTION 1: Identification

1.1 Product identifier

Trade name **Orange Blast**

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

Relevant identified uses **Cleaner/degreaser**

1.3 Details of the supplier of the safety data sheet

B&B Blending, LLC
10963 Leroy Drive
Northglenn CO 80233
United States

Telephone: 1.800.875.6320, 1.303.289.6320
e-mail: info@bbblending.com
Website: bbblending.com

e-mail (competent person) **btirrell@bbblending.com**

1.4 Emergency telephone number

Emergency information service **USA 1.800.535.5053, INTL 1.352.323.3500
24 hr emergency information**

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Category	Hazard class and category	Hazard statement
A.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
A.4S	skin sensitization	1	Skin Sens. 1	H317
A.9	specific target organ toxicity - repeated exposure	2	STOT RE 2	H373
B.6	flammable liquid	4	Flam. Liq. 4	H227
B.16	substance or mixture corrosive to metals	1	Met. Corr. 1	H290

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure. The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

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

- Signal word **danger**

- Pictograms

GHS05, GHS07,
GHS08





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- Hazard statements

H227	Combustible liquid.
H290	May be corrosive to metals.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234	Keep only in original container.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing must 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.
P310	Immediately call a poison center/doctor.
P321	Specific treatment (see on this label).
P362	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P390	Absorb spillage to prevent material damage.
P403+P235	Store in a well-ventilated place. Keep cool.
P406	Store in corrosive resistant container with a resistant inner liner.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazardous ingredients for labelling orange oil, sodium metasilicate, anhydrous, EDTA, anhydrous

2.3 Other hazards

This material is combustible, but will not ignite readily.

Hazards not otherwise classified

May be harmful if inhaled (GHS category 5: acutely toxic - inhalation).
Harmful to aquatic life (GHS category 3: aquatic toxicity - acute).

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Hazardous ingredients acc. to GHS				
Name of substance	Identifier	Wt%	Classification acc. to GHS	Notes
2-butoxy-1-ethanol	CAS No 111-76-2	3 - < 12	Acute Tox. 4 / H302 Acute Tox. 4 / H312 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319	IOELV



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Hazardous ingredients acc. to GHS				
Name of substance	Identifier	Wt%	Classification acc. to GHS	Notes
			Flam. Liq. 4 / H227	
sodium metasilicate, anhydrous	CAS No 6834-92-0	3 - < 12	Acute Tox. 4 / H302 Acute Tox. 3 / H331 Skin Corr. 1B / H314 Eye Dam. 1 / H318 STOT SE 3 / H335 Met. Corr. 1 / H290	
sodium dodecylbenzenesulfonate	CAS No 25155-30-0	1 - < 3	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Irrit. 2A / H319	
orange oil	CAS No 8028-48-6 68647-72-3	1 - < 3	Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226	
EDTA, anhydrous	CAS No 64-02-8	1 - < 3	Acute Tox. 4 / H302 Acute Tox. 4 / H332 Eye Dam. 1 / H318 STOT RE 2 / H373	

Notes

IOELV: Substance with a community indicative occupational exposure limit value

For full text of abbreviations: see SECTION 16. Exact percentage of ingredients is withheld as a trade secret.

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.

Following ingestion

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

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SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO₂)

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. Substance or mixture corrosive to metals.

Hazardous combustion products

Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate 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.

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.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains

Advices 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.

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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. Never add water to this product. 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.

- Corrosive conditions

Store in corrosive resistant container with a resistant inner liner.

- 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.

Control of the effects

Protect against external exposure, such as

Frost

- 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.

7.3 Specific end use(s)

See section 16 for a general overview.

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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 ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
US	2-butoxyethanol	111-76-2	REL	5 (10 h)	24 (10 h)						NIOSH REL
US	2-butoxyethanol	111-76-2	PEL	50	240						29 CFR 1910.1000
US	2-butoxyethanol (EGBE) (glycol monobutyl ether)	111-76-2	PEL (CA)	20	97						Cal/OSHA PEL

Notation

Ceiling-C
STEL

ceiling value is a limit value above which exposure should not occur
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)

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
2-butoxy-1-ethanol	111-76-2	DNEL	75 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
2-butoxy-1-ethanol	111-76-2	DNEL	98 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
sodium metasilicate, anhydrous	6834-92-0	DNEL	6.22 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
sodium metasilicate, anhydrous	6834-92-0	DNEL	1.49 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
sodium dodecylbenzenesulfonate	25155-30-0	DNEL	52 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
sodium dodecylbenzenesulfonate	25155-30-0	DNEL	52 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
sodium dodecylbenzenesulfonate	25155-30-0	DNEL	52 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
sodium dodecylbenzenesulfonate	25155-30-0	DNEL	52 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
sodium dodecylbenzenesulfonate	25155-30-0	DNEL	57.2 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
sodium dodecylbenzenesulfonate	25155-30-0	DNEL	80 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
orange oil	8028-48-6 68647-72-3	DNEL	31.1 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects



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Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
orange oil	8028-48-6 68647-72-3	DNEL	8.89 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
orange oil	8028-48-6 68647-72-3	DNEL	185.8 µg/ cm ²	human, dermal	worker (industry)	acute - local effects
EDTA, anhydrous	64-02-8	DNEL	1.5 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
EDTA, anhydrous	64-02-8	DNEL	1.5 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects

Relevant PNECs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
2-butoxy-1-ethanol	111-76-2	PNEC	8.8 mg/l	aquatic organisms	freshwater	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	0.88 mg/l	aquatic organisms	marine water	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	463 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	34.6 mg/kg	benthic organisms	sediment	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	3.13 mg/kg	terrestrial organisms	soil	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	9.1 mg/l	aquatic organisms	water	intermittent release
sodium dodecylbenzenesulfonate	25155-30-0	PNEC	0.693 mg/l	aquatic organisms	freshwater	short-term (single instance)
sodium dodecylbenzenesulfonate	25155-30-0	PNEC	1 mg/l	aquatic organisms	marine water	short-term (single instance)
sodium dodecylbenzenesulfonate	25155-30-0	PNEC	50 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
sodium dodecylbenzenesulfonate	25155-30-0	PNEC	27.5 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
sodium dodecylbenzenesulfonate	25155-30-0	PNEC	2.75 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
sodium dodecylbenzenesulfonate	25155-30-0	PNEC	25 mg/kg	terrestrial organisms	soil	short-term (single instance)
orange oil	8028-48-6 68647-72-3	PNEC	2.1 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
orange oil	8028-48-6 68647-72-3	PNEC	1.3 mg/kg	benthic organisms	sediment	short-term (single instance)
orange oil	8028-48-6 68647-72-3	PNEC	0.13 mg/kg	pelagic organisms	sediment	short-term (single instance)
orange oil	8028-48-6 68647-72-3	PNEC	44.44 mg/kg	(top) predators	water	short-term (single instance)

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Relevant PNECs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
orange oil	8028-48-6 68647-72-3	PNEC	5.77 µg/l	aquatic organisms	water	intermittent re-lease
orange oil	8028-48-6 68647-72-3	PNEC	5.4 µg/l	aquatic organisms	freshwater	short-term (single instance)
orange oil	8028-48-6 68647-72-3	PNEC	0.54 µg/l	aquatic organisms	marine water	short-term (single instance)
orange oil	8028-48-6 68647-72-3	PNEC	2.1 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
orange oil	8028-48-6 68647-72-3	PNEC	1.3 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
orange oil	8028-48-6 68647-72-3	PNEC	0.13 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
orange oil	8028-48-6 68647-72-3	PNEC	0.261 mg/kg	terrestrial organisms	soil	short-term (single instance)
EDTA, anhydrous	64-02-8	PNEC	2.2 mg/l	aquatic organisms	freshwater	short-term (single instance)
EDTA, anhydrous	64-02-8	PNEC	43 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
EDTA, anhydrous	64-02-8	PNEC	0.72 mg/kg	terrestrial organisms	soil	short-term (single instance)
EDTA, anhydrous	64-02-8	PNEC	1.2 mg/l	aquatic organisms	water	intermittent re-lease
EDTA, anhydrous	64-02-8	PNEC	0.22 mg/l	aquatic organisms	marine water	short-term (single instance)

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, which are tested according to EN 374. 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 respiratory protection.

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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

Appearance

Physical state	liquid
Color	orange
Odor	citrus

Other safety parameters

pH (value)	13.34 (25 °C) (base)
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	61 °C at 101.3 kPa
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapor pressure	31.69 hPa at 25 °C
Density	1 g/cm ³ at 25 °C
Vapor density	this information is not available

Solubility(ies)

- Water solubility	miscible in any proportion
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Partition coefficient

- n-octanol/water (log KOW)	this information is not available
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Auto-ignition temperature	230 °C
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none



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9.2 Other information

Temperature class (USA, acc. to NEC 500)	T2D (maximum permissible surface temperature on the equipment: 215° C)
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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. Substance or mixture corrosive to metals.

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

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. 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 inhaled.



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Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
2-butoxy-1-ethanol	111-76-2	oral	1,746 mg/kg
2-butoxy-1-ethanol	111-76-2	dermal	1,100 mg/kg
2-butoxy-1-ethanol	111-76-2	inhalation: vapor	11 mg/l/4h
sodium metasilicate, anhydrous	6834-92-0	oral	1,349 mg/kg
sodium metasilicate, anhydrous	6834-92-0	inhalation: vapor	2.06 mg/l/4h
sodium metasilicate, anhydrous	6834-92-0	inhalation: dust/mist	0.5 mg/l/4h
sodium dodecylbenzenesulfonate	25155-30-0	oral	650 mg/kg
EDTA, anhydrous	64-02-8	oral	1,913 mg/kg
EDTA, anhydrous	64-02-8	inhalation: dust/mist	1.5 mg/l/4h

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

May cause an allergic skin reaction.

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-butoxy-1-ethanol	111-76-2	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

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

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SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-butoxy-1-ethanol	111-76-2	LC50	1,474 mg/l	fish	96 h
2-butoxy-1-ethanol	111-76-2	EC50	1,550 mg/l	aquatic invertebrates	48 h
2-butoxy-1-ethanol	111-76-2	ErC50	1,840 mg/l	algae	72 h
sodium metasilicate, anhydrous	6834-92-0	LC50	310 mg/l	fish	96 h
sodium metasilicate, anhydrous	6834-92-0	EC50	1,700 mg/l	aquatic invertebrates	48 h
sodium dodecylbenzenesulfonate	25155-30-0	LC50	7.16 mg/l	fish	96 h
sodium dodecylbenzenesulfonate	25155-30-0	EC50	6.3 mg/l	aquatic invertebrates	48 h
orange oil	8028-48-6 68647-72-3	LL50	5.65 mg/l	fish	96 h
orange oil	8028-48-6 68647-72-3	EL50	1.4 mg/l	aquatic invertebrates	24 h
EDTA, anhydrous	64-02-8	LC50	121 mg/l	fish	96 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

Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential

None of the ingredients are listed.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks


Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number	3267
14.2 UN proper shipping name	Corrosive liquid, basic, organic, n.o.s.
Technical name (hazardous ingredients)	Propan-2-ol, orange oil
14.3 Transport hazard class(es)	
Class	8 (corrosive substances)
14.4 Packing group	III (substance presenting low danger)
14.5 Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regulations
14.6 Special precautions for user	
There is no additional information.	
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	
The cargo is not intended to be carried in bulk.	

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT)

Index number	3267
Proper shipping name	Corrosive liquid, basic, organic, n.o.s.
- Particulars in the shipper's declaration	UN3267, Corrosive liquid, basic, organic, n.o.s., (Propan-2-ol, orange oil, solution), 8, III
Class	8
Packing group	III
Danger label(s)	8
	
Special provisions (SP)	IB3, T7, TP1, TP28
ERG No	153

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International Maritime Dangerous Goods Code (IMDG)

UN number	3267
Proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
Class	8
Marine pollutant	-
Packing group	III
Danger label(s)	8



Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-B
Stowage category	A
Segregation group	18 - Alkalis

International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	3267
Proper shipping name	Corrosive liquid, basic, organic, n.o.s.
Class	8
Packing group	III
Danger label(s)	8



Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	1 L

SECTION 15: Regulatory information

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

National regulations (United States)

15.1.5 **Toxic Substance Control Act (TSCA)** all ingredients are listed
0.1

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed



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Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
sodium dodecylbenzenesulfonate	25155-30-0		1	1000 (454)

Legend

1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

Clean Air Act

none of the ingredients are listed

15.1.5 New Jersey Worker and Community Right to Know Act 0.5

Right to Know Hazardous Substance List			
Name acc. to inventory	CAS No	Remarks	Classifications
2-BUTOXY ETHANOL (ETHANOL, 2-BUT-OXY-, BUTYL CELLOSOLVE)	111-76-2		CA F2
SODIUM DODECYLBENZENE SULFON-ATE (BENZENESULFONIC ACID, DO-DECYL-, SODIUM SALT)	25155-30-0		

Legend

CA Carcinogenic
F2 Flammable - Second Degree

15.1.5 California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987 0.6

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
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	-	

Chronic: chronic hazard
Flammability: flammability hazard
Health: health hazard
Personal protection: personal protective equipment (PPE) for normal use
Physical hazard: reactivity

NFPA® 704

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



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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		

National inventories

Country	Inventory	Status
CA	DSL	all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
US	TSCA	all ingredients are listed

Legend

DSL Domestic Substances List (DSL)
REACH Reg. REACH registered substances
TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

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

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.3	e-mail (competent person): bblahnik@bbblending.com (Robert Blahnik)	e-mail (competent person): btirrell@bbblending.com	yes
1.4	Emergency information service: USA 1.800.535.5053, INTL 1.352.323.3500 This number is only available during the following of- fice hours: Mon-Fri 09:00 AM - 05:00 PM	Emergency information service: USA 1.800.535.5053, INTL 1.352.323.3500 24 hr emergency information	yes
2.1		Classification acc. to OSHA "Hazard Communica- tion Standard" (29 CFR 1910.1200): change in the listing (table)	yes
2.2		- Hazard statements: change in the listing (table)	yes
2.2		- Precautionary statements: change in the listing (table)	yes
3.2		Hazardous ingredients acc. to GHS: change in the listing (table)	yes
4.1	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 eye contact: Remove contact lenses, if present and easy to do. Continue rinsing.	yes
4.2	Most important symptoms and effects, both acute and delayed: Symptoms and effects are not known to date.		yes



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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
4.3	Indication of any immediate medical attention and special treatment needed: none		yes
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.	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. Substance or mixture corrosive to metals.	yes
7.2		- Corrosive conditions: Store in corrosive resistant container with a resistant inner liner.	yes
7.2		- Packaging compatibilities: Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.	yes
8.1		Relevant DNELs of components of the mixture: change in the listing (table)	yes
8.1		Relevant PNECs of components of the mixture: change in the listing (table)	yes
10.1	Reactivity: Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.	Reactivity: Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition. Substance or mixture corrosive to metals.	yes
11.1		IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: change in the listing (table)	yes
12.1		Aquatic toxicity (acute) of components of the mixture: change in the listing (table)	yes
13.1	Waste treatment of containers/packages: Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.	Waste treatment of containers/packages: Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.	yes
14.1	UN number: not subject to transport regulations	UN number: 3267	yes
14.2	UN proper shipping name: not relevant	UN proper shipping name: Corrosive liquid, basic, organic, n.o.s.	yes
14.2		Technical name (hazardous ingredients): Propan-2-ol, orange oil	yes
14.3	Transport hazard class(es): none	Transport hazard class(es)	yes
14.3		Class: 8 (corrosive substances)	yes
14.4	Packing group: not relevant	Packing group: III (substance presenting low danger)	yes



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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
14.7	Transport of dangerous goods by road or rail (49 CFR US DOT): Not subject to transport regulations.	Transport of dangerous goods by road or rail (49 CFR US DOT)	yes
14.7		Index number: 3267	yes
14.7		Proper shipping name: Corrosive liquid, basic, organic, n.o.s.	yes
14.7		Particulars in the shipper's declaration: UN3267, Corrosive liquid, basic, organic, n.o.s., (Propan-2-ol, orange oil, solution), 8, III	yes
14.7		Class: 8	yes
14.7		Packing group: III	yes
14.7		Danger label(s): 8	yes
14.7		Danger label(s): change in the listing (table)	yes
14.7		Special provisions (SP): IB3, T7, TP1, TP28	yes
14.7		ERG No: 153	yes
14.7	International Maritime Dangerous Goods Code (IM-DG): Not subject to IMDG.	International Maritime Dangerous Goods Code (IM-DG)	yes
14.7		UN number: 3267	yes
14.7		Proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	yes
14.7		Class: 8	yes
14.7		Marine pollutant: -	yes
14.7		Packing group: III	yes
14.7		Danger label(s): 8	yes
14.7		Danger label(s): change in the listing (table)	yes
14.7		Special provisions (SP): 223, 274	yes
14.7		Excepted quantities (EQ): E1	yes
14.7		Limited quantities (LQ): 5 L	yes
14.7		EmS: F-A, S-B	yes



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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
14.7		Stowage category: A	yes
14.7		Segregation group: 18 - Alkalis	yes
14.7	International Civil Aviation Organization (ICAO-IATA/DGR): Not subject to ICAO-IATA.	International Civil Aviation Organization (ICAO-IATA/DGR)	yes
14.7		UN number: 3267	yes
14.7		Proper shipping name: Corrosive liquid, basic, organic, n.o.s.	yes
14.7		Class: 8	yes
14.7		Packing group: III	yes
14.7		Danger label(s): 8	yes
14.7		Danger label(s): change in the listing (table)	yes
14.7		Special provisions (SP): A3	yes
14.7		Excepted quantities (EQ): E1	yes
14.7		Limited quantities (LQ): 1 L	yes
15.1.50.1		Toxic Substance Control Act (TSCA): all ingredients are listed	yes
15.1.50.6		National inventories	yes
15.1.50.6		National inventories: change in the listing (table)	yes

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 § 40 U.S. Department of Transportation
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
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)



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Abbr.	Descriptions of used abbreviations
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
EmS	Emergency Schedule
ERG No	Emergency Response Guidebook - Number
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
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
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
Met. Corr.	Substance or mixture corrosive to metals
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
PNEC	Predicted No-Effect Concentration
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
TWA	Time-weighted average
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 tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).



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

Code	Text
H226	Flammable liquid and vapor.
H227	Combustible liquid.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.