

acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

## **SECTION 1: Identification**

#### 1.1 Product identifier

Trade name A/C Pro Vent & Duct Cleaner - Aerosol

Alternative number(s) 048168179008

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

Relevant identified uses General use

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

Energizer Manufacturing, Inc. 25225 Detroit Rd. Westlake OH 44145 United States

Telephone: 800-383-7323; 314-985-2000 (USA / CANADA)

Website: http://data.energizer.com

Energizer Trading Ltd.

Sword House, Totteridge Road, High Wycombe, HP13 6DG, UK

Telephone: +44(0)8000353376

e-mail: ConsumerServiceEU@energizer.com

#### 1.4 Emergency telephone number

Emergency information service 1-314-985-1511 Int'l: 1-800-526-4727

This number is only available during the following

office hours: Mon-Fri 09:00 AM - 05:00 PM

#### **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 state- ment
B.3	flammable aerosol	2	Flam. Aerosol 2	H223
B.5	gases under pressure	С	Press. Gas C	H280

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects Contains gas under pressure; may explode if heated.

#### 2.2 Label elements

United States: en Page: 1 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

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

- Signal word warning

- Pictograms

GHS02, GHS04



#### - Hazard statements

H223 Flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

#### - Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P410+P403 Protect from sunlight. Store in a well-ventilated place.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

#### 2.3 Other hazards

of no significance

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

#### 3.1 Substances

Not relevant (mixture)

#### 3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Fluorinated alkane	CAS No trade secret	10-<25	Flam. Gas 1 / H220 Press. Gas C / H280	
isopropyl alcohol	CAS No 67-63-0	1-<5	Eye Irrit. 2 / H319 STOT SE 3 / H336 Flam. Liq. 2 / H225	<b>⋄</b> !
1-butoxypropan-2-ol	CAS No 5131-66-8	1-<5	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Flam. Liq. 3 / H226	

United States: en Page: 2 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
morpholine	CAS No 110-91-8	<1	Acute Tox. 4 / H302 Acute Tox. 3 / H311 Acute Tox. 4 / H332 Skin Corr. 1B / H314 Flam. Liq. 3 / H226	

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. Provide fresh air.

#### Following skin contact

Thaw frosted parts with lukewarm water. Do not rub affected area.

#### 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

Unsuitable extinguishing media

Water jet

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

Contact with the product can cause burns and/or frostbite. Contains gas under pressure; may explode if heated.

United States: en Page: 3 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

#### Hazardous combustion products

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

#### 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.

## **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

Advice on how to contain a spill

Covering of drains

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. Use only in well-ventilated areas.

#### 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

Level 1 Aerosol.

United States: en Page: 4 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

Managing of associated risks

- Flammability hazards

Do not spray on an open flame or other ignition source. Protect from sunlight.

Control of the effects

Protect against external exposure, such as

Frost

- 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.

## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/ m³]	STEL [ppm]	STEL [mg/ m³]	Ceil- ing-C [ppm]	Ceil- ing-C [mg/ m³]	Nota tion	Sourc e
US	morpholine	110-91-8	REL	20 (10 h)	70 (10 h)	30	105				NIOSH REL
US	morpholine	110-91-8	TLV®	20							AC- GIH® 2019
US	morpholine	110-91-8	PEL	20	70						29 CFR 1910.1 000
US	morpholine (tet- rahydro-2H-1,4- oxazine)	110-91-8	PEL (CA)	20	70	30	105				Cal/ OSHA PEL
US	2-propanol	67-63-0	TLV®	200		400					AC- GIH® 2019
US	isopropyl alcohol	67-63-0	PEL (CA)	400	980	500	1,225				Cal/ OSHA PEL
US	isopropyl alcohol	67-63-0	REL	400 (10 h)	980 (10 h)	500	1,225				NIOSH REL

United States: en Page: 5 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

## Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/ m³]	STEL [ppm]	STEL [mg/ m³]	Ceil- ing-C [ppm]	Ceil- ing-C [mg/ m³]	Nota tion	Sourc e
US	isopropyl alcohol	67-63-0	PEL	400	980						29 CFR 1910.1 000

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 timeweighted average (unless otherwise specified

## Biological limit values

Country	Name of agent	Parameter	Nota- tion	Identifier	Value	Source
US	isopropanol	acetone		BEI®	40 mg/l	ACGIH® 2019

## Relevant DNELs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time
Fluorinated alkane	trade secret	DNEL	2,713 mg/ m³	human, inhalatory	worker (industry)	chronic - systemic effects
isopropyl alcohol	67-63-0	DNEL	500 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
isopropyl alcohol	67-63-0	DNEL	888 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
1-butoxypropan-2-ol	5131-66-8	DNEL	147 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
1-butoxypropan-2-ol	5131-66-8	DNEL	52 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
morpholine	110-91-8	DNEL	91 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
morpholine	110-91-8	DNEL	36 mg/m³	human, inhalatory	worker (industry)	chronic - local ef- fects
morpholine	110-91-8	DNEL	72 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects

United States: en Page: 6 / 23



acc. to 29 CFR 1910.1200 App D

# A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

## Relevant DNELs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time
morpholine	110-91-8	DNEL	1.04 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

## Relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time
Fluorinated alkane	trade secret	PNEC	0.048 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)
Fluorinated alkane	trade secret	PNEC	0.019 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	marine sediment	short-term (single instance)
Fluorinated alkane	trade secret	PNEC	0.0048 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (single instance)
Fluorinated alkane	trade secret	PNEC	0.19 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
Fluorinated alkane	trade secret	PNEC	0.141 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)
Fluorinated alkane	trade secret	PNEC	0.48 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	water	intermittent re- lease
isopropyl alcohol	67-63-0	PNEC	160 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	water	short-term (single instance)
isopropyl alcohol	67-63-0	PNEC	140.9 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	water	intermittent re- lease
isopropyl alcohol	67-63-0	PNEC	140.9 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)
isopropyl alcohol	67-63-0	PNEC	140.9 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (single instance)
isopropyl alcohol	67-63-0	PNEC	2,251 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
isopropyl alcohol	67-63-0	PNEC	552 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
isopropyl alcohol	67-63-0	PNEC	552 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	marine sediment	short-term (single instance)
isopropyl alcohol	67-63-0	PNEC	28 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)

United States: en Page: 7 / 23



acc. to 29 CFR 1910.1200 App D

# A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

## Relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time
1-butoxypropan-2-ol	5131-66-8	PNEC	0.525 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	0.052 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	10 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	2.36 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	0.236 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	marine sediment	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	0.16 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)
morpholine	110-91-8	PNEC	0.163 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)
morpholine	110-91-8	PNEC	0.016 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (single instance)
morpholine	110-91-8	PNEC	10 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
morpholine	110-91-8	PNEC	1.83 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
morpholine	110-91-8	PNEC	0.183 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	marine sediment	short-term (single instance)
morpholine	110-91-8	PNEC	0.269 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	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 protective gloves.

United States: en Page: 8 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

#### - Other protection measures

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

#### Respiratory protection

During spraying wear suitable respiratory equipment.

## 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	aerosol (spray aerosol)
Color	various
Odor	characteristic

#### Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	not determined
Evaporation rate	Not determined
Flammability (solid, gas)	flammable aerosol in accordance with GHS criteria

#### **Explosive limits**

- Lower explosion limit (LEL)	3.7 vol%
- Upper explosion limit (UEL)	18 vol%

United States: en Page: 9 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Replaces version of: 2020-10-21 (4)

Vapor pressure 514,624 Pa at 25 °C

Density not determined

Vapor density this information is not available

Relative density Information on this property is not available

Solubility(ies) not determined

Revision: 2021-03-18

#### Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	440 °C
Viscosity	not relevant (aerosol)
Explosive properties	none
Oxidizing properties	none

#### 9.2 Other information

Propellant content	10 %
Temperature class (USA, acc. to NEC 500)	T2 (maximum permissible surface temperature on the equipment: 300°C)

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

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

#### If heated:

Danger of explosion, Gas under pressure, Danger of bursting container

#### 10.2 Chemical stability

See below "Conditions to avoid".

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

Do not spray on an open flame or other ignition source. Keep away from heat.

United States: en Page: 10 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

Hints to prevent fire or explosion

Protect from sunlight.

## 10.5 Incompatible materials

Oxidizers

## 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.

## Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
morpholine	110-91-8	oral	1,900 <sup>mg</sup> / <sub>kg</sub>
morpholine	110-91-8	dermal	500 <sup>mg</sup> / <sub>kg</sub>
morpholine	110-91-8	inhalation: vapor	11 <sup>mg</sup> / <sub>l</sub> /4h

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

## 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.

United States: en Page: 11 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

## IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Name of substance	CAS No	Classification	Number
isopropyl alcohol	67-63-0	3	
morpholine	110-91-8	3	

#### Legend

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.

#### 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 Endocrine disrupting properties

None of the ingredients are listed.

#### 12.7 Other adverse effects

Data are not available.

United States: en Page: 12 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

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

DOT	UN 1950
IMDG-Code	UN 1950
ICAO-TI	UN 1950

#### 14.2 UN proper shipping name

DOT	Aerosols
IMDG-Code	AEROSOLS

ICAO-TI Aerosols, flammable

#### 14.3 Transport hazard class(es)

DOT	2.1
IMDG-Code	2.1
ICAO-TI	2.1

#### **14.4 Packing group** not assigned

## **14.5 Environmental hazards** non-environmentally hazardous acc. to the danger-

ous 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

DOT

United States: en Page: 13 / 23





acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

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

Particulars in the shipper's declaration UN1950, Aerosols, 2.1

Reportable quantity (RQ) 462,962,963 lbs (210,185,185 kg) (ethylenediamine)

Danger label(s) 2.1



Special provisions (SP) N82 ERG No 126

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

Particulars in the shipper's declaration UN1950, AEROSOLS, 2.1

Marine pollutant -

Danger label(s) 2.1



Special provisions (SP) 63, 190, 277, 327, 344, 381, 959

Excepted quantities (EQ) E0
Limited quantities (LQ) 1 L
EmS F-D, S-U

Stowage category -

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

Particulars in the shipper's declaration UN1950, Aerosols, flammable, 2.1

Danger label(s) 2.1



Special provisions (SP) A145, A167

Excepted quantities (EQ) E0
Limited quantities (LQ) 30 kg

United States: en Page: 14 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations specific for the product in question National regulations (United States)

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
isopropyl alcohol	67-63-0	only persons who manufacture by the strong acid process are sub- ject, supplier notification not re- quired	1987-01-01

#### **Clean Air Act**

Name of substance	CAS No	Type of registra- tion	Basis for listing	Threshold quantity (lbs)
Fluorinated alkane	75-37-6	Flammable sub- stance	f	10000

Legend

f Flammable gas.

## **Right to Know Hazardous Substance List**

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	Name acc. to inventory	CAS No	Functional- ity	Authoritative Lists
Water		7732-18-5	solvents	
Fluorinated alkane		trade secret	fragrance	
Isopropyl alcohol	Isopropanol	67-63-0	diluent	OEHHA RELs
1-Butoxypropan-2-ol		5131-66-8	solvents	
Morpholine		110-91-8	corrosion in- hibitor	
Dihydromyrcenol		18479-58-8	fragrance	
Propylene Glycol 2-Butyl Ether		15821-83-7	solvents	
Hedione		24851-98-7	fragrance	

United States: en Page: 15 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

Name of substance	Name acc. to inventory	CAS No	Functional- ity	Authoritative Lists
Disodium Lauryl Phenyl Ether Disulfonate		119345-04- 9	cleaning agent	
Lilial	2-(4-tert-Butylbenzyl) propional- dehyde	80-54-6	fragrance	EU Fragrance Allergens
Hexyl salicylate		6259-76-3	fragrance	

## - Toxic or Hazardous Substance List (MA-TURA)

Name of substance	Name acc. to inventory	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Thres hold	De Minimis Concentra- tion Threshold
isopropyl alcohol	Isopropyl alcohol (mfg-strong acid process)	67-63-0				1.0 %

#### - Hazardous Substances List (MN-ERTK)

Name of substance	Name acc. to inventory	CAS No	References	Remarks
isopropyl alcohol	Isopropyl alcohol	67-63-0	A, N, O	

#### Legend

American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH

National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Safety and Health Standards," August 1988, available from NIOSH, Publications Dissemination Office, Division of Standards Development and Technology Transfer

O Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division

## - Hazardous Substance List (NJ-RTK)

Name of substance	Name acc. to inventory	CAS No	Remarks	Classifications
isopropyl alcohol	isopropyl alcohol (2-propanol) (isopropanol)	67-63-0		F3
morpholine	morpholine	110-91-8		CO F3 R1
Fluorinated alkane	1,1-difluoroethane	75-37-6		F4

#### Legend

CO Corrosive

F3 Flammable - Third Degree F4 Flammable - Fourth Degree R1 Reactive - First Degree

United States: en Page: 16 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name of substance	Name acc. to inventory	CAS No	Classification
isopropyl alcohol	2-PROPANOL	67-63-0	Е

Legend

Environmental hazard

#### - Hazardous Substance List (RI-RTK)

Name of substance	Name acc. to inventory	CAS No	References
isopropyl alcohol	isopropyl alcohol	67-63-0	Т, F
morpholine	Morpholine	110-91-8	T, F

Legend

F Flammability (NFPA®)
T Toxicity (ACGIH®)

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

The presence of Prop 65 chemicals in the product does not indicate whether or not a label warning is required.

Proposition 65 List of chemicals

Name acc. to inventory	CAS No	Remarks	Type of the toxicity
ethylene glycol monomethyl ether	109-86-4		developmental, male

# Drug precursors, Chemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, paragraphs 34 (list I) and 35 (list II)

none of the ingredients are listed

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

#### **NPCA-HMIS® III**

 $\label{thm:matter} \textit{Hazardous Materials Identification System. American Coatings Association.}$ 

Category	Rating	Description
Chronic	/	none
Health	0	no significant risk to health
Flammability	4	material that rapidly or completely vaporizes at atmospheric pressure and normal ambient temperature or that is readily dispersed in air and burn readily
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

United States: en Page: 17 / 23



acc. to 29 CFR 1910.1200 App D

# A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Replaces version of: 2020-10-21 (4)

Revision: 2021-03-18

Category	Rating	Description
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	4	material that rapidly or completely vaporizes at atmospheric pressure and normal ambient temperature or that is readily dispersed in air and burn readily
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
AU	AICS	all ingredients are listed or exempt from listing
CA	DSL	all ingredients are listed or exempt from listing
CN	IECSC	all ingredients are listed
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	all ingredients are listed or exempt from listing
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	all ingredients are listed or exempt from listing
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed or exempt from listing
PH	PICCS	all ingredients are listed or exempt from listing
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed or exempt from listing

Legend

Australian Inventory of Chemical Substances Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) AICS CICR CSCL-ENCS DSL

Domestic Substances List (DSL)

United States: en Page: 18 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

Legend

ECSI EC Substance Inventory (EINECS, ELINCS, NLP)

IECSC Inventory of Existing Chemical Substances Produced or Imported in China

**INSQ** National Inventory of Chemical Substances

ISHA-ENCS Inventory of Existing and New Chemical Substances (ISHA-ENCS)

KECI NZIoC

Korea Existing Chemicals Inventory
New Zealand Inventory of Chemicals
Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH registered substances
Taiwas Chemical Substances **PICCS** 

REACH Reg.

Taiwan Chemical Substance Inventory TCSI

**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- relev- ant
2.3	Other hazards	Other hazards: of no significance	yes
2.3	Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.		yes
12.7	Other adverse effects	Other adverse effects: Data are not available.	yes
14.1	UN number: 1950	UN number	yes
14.1		DOT: UN 1950	yes
14.1		IMDG-Code: UN 1950	yes
14.1		ICAO-TI: UN 1950	yes
14.2	UN proper shipping name: Aerosols	UN proper shipping name	yes
14.2		DOT: Aerosols	yes
14.2		IMDG-Code: AEROSOLS	yes
14.2		ICAO-TI: Aerosols, flammable	yes

United States: en Page: 19 / 23



acc. to 29 CFR 1910.1200 App D

# A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
14.3	Class: 2.1 (gases) (aerosol) (flammable)		yes
14.3		DOT: 2.1	yes
14.3		IMDG-Code: 2.1	yes
14.3		ICAO-TI: 2.1	yes
14.4	Packing group: not assigned to a packing group	Packing group: not assigned	yes
14.7	Index number: 1950		yes
14.7	Proper shipping name: Aerosols		yes
14.7	Class: 2.1		yes
14.7		Danger label(s): change in the listing (table)	yes
14.7	UN number: 1950		yes
14.7	Proper shipping name: AEROSOLS		yes
14.7	Class: 2.1		yes
14.7	UN number: 1950		yes
14.7	Proper shipping name: Aerosols, flammable		yes
14.7	Class: 2.1		yes
15.1		Cleaning Product Right to Know Act Substance List (CA-RTK): change in the listing (table)	yes
15.1	California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987	California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987: The presence of Prop 65 chemicals in the product does not indicate whether or not a label warning is required.	yes

United States: en Page: 20 / 23



acc. to 29 CFR 1910.1200 App D

# A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
15.1		Drug precursors, Chemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, para- graphs 34 (list I) and 35 (list II): none of the ingredients are listed	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 U.S. Department of Transportation
ACGIH®	American Conference of Governmental Industrial Hygienists
ACGIH® 2019	From ACGIH®, 2019 TLVs® and BEIs® Book. Copyright 2019. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement
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
DEP CODE	Department of Environmental Protection Code
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ERG No	Emergency Response Guidebook - Number
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid

United States: en Page: 21 / 23



acc. to 29 CFR 1910.1200 App D

# A/C Pro Vent & Duct Cleaner - Aerosol

Revision: 2021-03-18

Version number: 5.0 Replaces version of: 2020-10-21 (4)

Abbr.	Descriptions of used abbreviations
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LHS	Lower hazard substance
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NFPA®	National Fire Protection Association (United States)
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NLP	No-Longer Polymer
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
Press. Gas	Gas under pressure
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TLV®	Threshold Limit Values
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

United States: en Page: 22 / 23



acc. to 29 CFR 1910.1200 App D

## A/C Pro Vent & Duct Cleaner - Aerosol

Version number: 5.0 Revision: 2021-03-18 Replaces version of: 2020-10-21 (4)

#### 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).

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

Code	Text
H220	Extremely flammable gas.
H223	Flammable aerosol.
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.

#### Disclaimer

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

United States: en Page: 23 / 23