

AIR INTAKE SYSTEM CLEANER, 425 g

Version Revision Date: SDS Number: Date of last issue: 09/16/2021
3.3 06/09/2022 10789994-00006 Date of first issue: 02/01/2018

SECTION 1. IDENTIFICATION

Product name : AIR INTAKE SYSTEM CLEANER, 425 g
Product code : 5861.112400
Other means of identification : No data available

Manufacturer or supplier's details

Company name of supplier : Würth Canada Limited
Address : 345 Hanlon Creek Blvd
 GUELPH, ON N1C 0A1
Telephone : +1 (905) 564 6225
Telefax : +1 (905) 564 3671
Emergency telephone : Emergencies involving a spill, fire, explosion or exposure:
 CHEMTREC (24/7): 1-800-424-9300
 Transport related emergencies:
 CANUTEC (24/7): 1-613-996-6666 or * 666 (cell)

 Urgences impliquant un déversement, incendie, explosion ou
 exposition:
 CHEMTREC (24/7): 1-800-424-9300
 Urgences liées au transport:
 CANUTEC (24/7): 1-613-996-6666 ou * 666 (cellulaire)

E-mail address : prodsafe@wurth.ca

Recommended use of the chemical and restrictions on use

Recommended use : Cleaning agent
 Detergent

Restrictions on use : Not applicable

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the Hazardous Products Regulations**

Flammable aerosols : Category 1
Gases under pressure : Liquefied gas
Skin irritation : Category 2
Eye irritation : Category 2A

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

Reproductive toxicity : Category 2
Specific target organ toxicity : Category 3
- single exposure
Specific target organ toxicity : Category 2 (Central nervous system, Auditory system)
- repeated exposure
Aspiration hazard : Category 1

GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs (Central nervous system, Auditory system) through prolonged or repeated exposure.

Precautionary Statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P260 Do not breathe spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, protective clothing, eye protection and face protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical attention.

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
 Date of first issue: 02/01/2018

P331 Do NOT induce vomiting.
 P332 + P313 If skin irritation occurs: Get medical attention.
 P337 + P313 If eye irritation persists: Get medical attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.
 P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C (122 °F).

Disposal:

P501 Dispose of contents and container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Toluene	Benzene, methyl-	108-88-3	$\geq 30 - < 60$ *
Xylene	Benzene, dimethyl-	1330-20-7	$\geq 10 - < 30$ *
Acetone	2-Propanone	67-64-1	$\geq 10 - < 30$ *
Ethylbenzene	Benzene, ethyl-	100-41-4	$\geq 5 - < 10$ *
Carbon dioxide	Carbonic anhydride	124-38-9	$\geq 1 - < 5$ *
Methanol	Methyl alcohol	67-56-1	$\geq 0.1 - < 1$ *

* Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
 When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : If inhaled, remove to fresh air.
 Get medical attention.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
 Get medical attention.
 Wash clothing before reuse.
 Thoroughly clean shoes before reuse.

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Get medical attention.
- If swallowed : If swallowed, DO NOT induce vomiting.
If vomiting occurs have person lean forward.
Call a physician or poison control center immediately.
Rinse mouth thoroughly with water.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of damaging the unborn child.
May cause damage to organs through prolonged or repeated exposure.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
- Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire fighting : Flash back possible over considerable distance.
Vapors may form explosive mixtures with air.
Exposure to combustion products may be a hazard to health.
If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
- Hazardous combustion products : Carbon oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.
Use personal protective equipment.
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
- Environmental precautions : Avoid release to the environment.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g., by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapors/mists with a water spray jet.
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.
If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.
- Advice on safe handling : Do not get on skin or clothing.
Do not breathe spray.
Do not swallow.
Do not get in eyes.
Wash skin thoroughly after handling.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Keep container tightly closed.
Already sensitized individuals, and those susceptible

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
 Date of first issue: 02/01/2018

to asthma, allergies, chronic or recurrent respiratory disease, should consult their physician regarding working with respiratory irritants or sensitizers.
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 Take precautionary measures against static discharges.
 Take care to prevent spills, waste and minimize release to the environment.
 Do not spray on an open flame or other ignition source.

Conditions for safe storage : Store locked up.
 Keep tightly closed.
 Keep in a cool, well-ventilated place.
 Store in accordance with the particular national regulations.
 Do not pierce or burn, even after use.
 Keep cool. Protect from sunlight.

Materials to avoid : Do not store with the following product types:
 Self-reactive substances and mixtures
 Organic peroxides
 Oxidizing agents
 Flammable solids
 Pyrophoric liquids
 Pyrophoric solids
 Self-heating substances and mixtures
 Substances and mixtures which in contact with water emit flammable gases
 Explosives
 Gases

Recommended storage temperature : < 40 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Toluene	108-88-3	TWA	50 ppm 188 mg/m ³	CA AB OEL
		TWA	20 ppm	CA BC OEL
		TWAEV	50 ppm 188 mg/m ³	CA QC OEL
Xylene	1330-20-7	TWA	20 ppm	ACGIH
		TWA	100 ppm 434 mg/m ³	CA AB OEL
		STEL	150 ppm 651 mg/m ³	CA AB OEL
		TWAEV	100 ppm 434 mg/m ³	CA QC OEL
		STEV	150 ppm 651 mg/m ³	CA QC OEL

AIR INTAKE SYSTEM CLEANER, 425 g
Version
3.3Revision Date:
06/09/2022SDS Number:
10789994-00006Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

		TWA	100 ppm	CA BC OEL
		STEL	150 ppm	CA BC OEL
		TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
Acetone	67-64-1	TWA	500 ppm 1,200 mg/m ³	CA AB OEL
		STEL	750 ppm 1,800 mg/m ³	CA AB OEL
		TWA	250 ppm	CA BC OEL
		STEL	500 ppm	CA BC OEL
		TWAEV	500 ppm 1,190 mg/m ³	CA QC OEL
		STEV	1,000 ppm 2,380 mg/m ³	CA QC OEL
		TWA	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
Ethylbenzene	100-41-4	STEL	125 ppm 543 mg/m ³	CA AB OEL
		TWA	100 ppm 434 mg/m ³	CA AB OEL
		TWA	20 ppm	CA BC OEL
		TWAEV	20 ppm	CA QC OEL
		TWA	20 ppm	ACGIH
Carbon dioxide	124-38-9	TWA	5,000 ppm 9,000 mg/m ³	CA AB OEL
		STEL	30,000 ppm 54,000 mg/m ³	CA AB OEL
		TWA	5,000 ppm	CA BC OEL
		STEL	15,000 ppm	CA BC OEL
		STEV	30,000 ppm 54,000 mg/m ³	CA QC OEL
		TWAEV	5,000 ppm 9,000 mg/m ³	CA QC OEL
		TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
Methanol	67-56-1	TWA	200 ppm 262 mg/m ³	CA AB OEL
		STEL	250 ppm 328 mg/m ³	CA AB OEL
		TWA	200 ppm	CA BC OEL
		STEL	250 ppm	CA BC OEL
		STEV	250 ppm 328 mg/m ³	CA QC OEL
		TWAEV	200 ppm 262 mg/m ³	CA QC OEL
		TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sam-pling time	Permissible concentra-tion	Basis

AIR INTAKE SYSTEM CLEANER, 425 g
Version
3.3Revision Date:
06/09/2022SDS Number:
10789994-00006Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

Toluene	108-88-3	Toluene	In blood	Prior to last shift of work-week	0.02 mg/l	ACGIH BEI
		Toluene	Urine	End of shift (As soon as possible after exposure ceases)	0.03 mg/l	ACGIH BEI
		o-Cresol	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/g Creatinine	ACGIH BEI
Xylene	1330-20-7	Methyl-hippuric acids	Urine	End of shift (As soon as possible after exposure ceases)	1.5 g/g creatinine	ACGIH BEI
Acetone	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	25 mg/l	ACGIH BEI
Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid	Urine	End of shift (As soon as possible after exposure ceases)	0.15 g/g creatinine	ACGIH BEI
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI

Engineering measures

- : Minimize workplace exposure concentrations.
- If sufficient ventilation is unavailable, use with local exhaust ventilation.
- If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

Personal protective equipment

- Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
- Filter type : Self-contained breathing apparatus
- Hand protection
Material : Nitrile rubber
- Remarks : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday. Breakthrough time is not determined for the product. Change gloves often!
- Eye protection : Wear the following personal protective equipment:
Safety goggles
- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Wear the following personal protective equipment:
If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic protective clothing.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
- Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.
When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : aerosol
- Propellant : Carbon dioxide
- Color : light yellow, clear
- Odor : aromatic
- Odor Threshold : No data available

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

pH	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	Not applicable
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Extremely flammable aerosol.
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	Not applicable
Relative vapor density	:	Not applicable
Relative density	:	0.845 (20 °C)
Solubility(ies)		
Water solubility	:	negligible
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Particle size	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Extremely flammable aerosol. Vapors may form explosive mixture with air.

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
Can react with strong oxidizing agents.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:**Toluene:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 28.1 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Xylene:

Acute oral toxicity : LD50 (Rat): 3,523 mg/kg
Method: Directive 67/548/EEC, Annex V, B.1.

Acute inhalation toxicity : LC50 (Rat): 27.571 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 4,200 mg/kg

AIR INTAKE SYSTEM CLEANER, 425 g

Version Revision Date: SDS Number: Date of last issue: 09/16/2021
3.3 06/09/2022 10789994-00006 Date of first issue: 02/01/2018

Acetone:

Acute oral toxicity : LD50 (Rat): 5,800 mg/kg

Acute inhalation toxicity : LC50 (Rat): 76 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): 7,426 mg/kg

Ethylbenzene:

Acute oral toxicity : LD50 (Rat): 3,500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 17.8 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Carbon dioxide:

Acute inhalation toxicity : LC50 (Rat): 40000 - 50000 ppm
Exposure time: 30 min
Test atmosphere: vapor

Methanol:

Acute oral toxicity : Acute toxicity estimate (Humans): 300 mg/kg
Method: Expert judgment

LD50 (Rat, female): 12.25 ml/kg

Acute inhalation toxicity : Acute toxicity estimate: 3 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Expert judgment
Remarks: Based on harmonised classification in EU regulation
1272/2008, Annex VI

Acute dermal toxicity : Acute toxicity estimate (Humans): 300 mg/kg
Method: Expert judgment

Skin corrosion/irritation

Causes skin irritation.

Components:**Toluene:**

Species : Rabbit
Method : Directive 67/548/EEC, Annex V, B.4.
Result : Skin irritation

Xylene:

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

Species : Rabbit
Result : Skin irritation

Acetone:

Assessment : Repeated exposure may cause skin dryness or cracking.

Methanol:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:**Toluene:**

Species : Rabbit
Result : No eye irritation
Method : OECD Test Guideline 405

Xylene:

Species : Rabbit
Result : Irritation to eyes, reversing within 21 days

Acetone:

Species : Rabbit
Result : Irritation to eyes, reversing within 21 days
Method : OECD Test Guideline 405

Methanol:

Species : Rabbit
Result : No eye irritation

Respiratory or skin sensitization**Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:**Toluene:**

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig
Method : Directive 67/548/EEC, Annex V, B.6.
Result : negative

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

Xylene:

Test Type : Local lymph node assay (LLNA)
Routes of exposure : Skin contact
Species : Mouse
Result : negative

Acetone:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : negative

Methanol:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : negative

Germ cell mutagenicity

Not classified based on available information.

Components:**Toluene:**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Result: negative

Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)
Species: Rat
Application Route: Intraperitoneal injection
Result: negative

Test Type: Rodent dominant lethal test (germ cell) (in vivo)
Species: Mouse
Application Route: inhalation (vapor)
Method: OECD Test Guideline 478
Result: negative

Xylene:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: Chromosome aberration test in vitro
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Result: negative

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

Genotoxicity in vivo : Test Type: In vitro sister chromatid exchange assay in mammalian cells
Result: negative

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)
Species: Mouse
Application Route: Skin contact
Result: negative

Acetone:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Result: negative

Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: Chromosome aberration test in vitro
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse
Application Route: Ingestion
Result: negative

Ethylbenzene:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Test Type: Chromosome aberration test in vitro
Result: negative

Genotoxicity in vivo : Test Type: Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo
Species: Mouse
Application Route: Inhalation
Method: OECD Test Guideline 486
Result: negative

Methanol:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

Species: Mouse
Application Route: Intraperitoneal injection
Result: negative

Carcinogenicity

Not classified based on available information.

Components:**Toluene:**

Species : Rat
Application Route : inhalation (vapor)
Exposure time : 103 weeks
Result : negative

Species : Mouse
Application Route : Skin contact
Exposure time : 24 Months
Result : negative

Xylene:

Species : Rat
Application Route : Ingestion
Exposure time : 103 weeks
Result : negative

Acetone:

Species : Mouse
Application Route : Skin contact
Exposure time : 424 days
Result : negative

Ethylbenzene:

Species : Rat
Application Route : inhalation (vapor)
Exposure time : 104 weeks
Result : positive
Remarks : The mechanism or mode of action may not be relevant in humans.

Methanol:

Species : Mouse
Application Route : inhalation (vapor)
Exposure time : 18 Months
Result : negative

Reproductive toxicity

Suspected of damaging the unborn child.

Components:**Toluene:**

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: inhalation (vapor)
Method: OECD Test Guideline 416
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: inhalation (vapor)
Result: positive

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

Xylene:

Effects on fertility : Test Type: One-generation reproduction toxicity study
Species: Rat
Application Route: inhalation (vapor)
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: inhalation (vapor)
Result: negative

Acetone:

Effects on fertility : Test Type: One-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: inhalation (vapor)
Result: negative

Ethylbenzene:

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: inhalation (vapor)
Method: OECD Test Guideline 416
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Inhalation
Method: OECD Test Guideline 414
Result: negative

Methanol:

Effects on fertility : Test Type: Fertility/early embryonic development
Species: Mouse

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

Application Route: Ingestion

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Mouse
Application Route: Ingestion
Result: positive
Remarks: The effects were seen only at maternally toxic doses.

STOT-single exposure

May cause respiratory irritation.

May cause drowsiness or dizziness.

Components:**Toluene:**

Assessment : May cause drowsiness or dizziness.

Xylene:

Assessment : May cause respiratory irritation.

Acetone:

Assessment : May cause drowsiness or dizziness.

Methanol:

Target Organs : Eye, Central nervous system

Assessment : Causes damage to organs.

STOT-repeated exposure

May cause damage to organs (Central nervous system, Auditory system) through prolonged or repeated exposure.

Components:**Toluene:**

Routes of exposure : Inhalation

Target Organs : Central nervous system

Assessment : May cause damage to organs through prolonged or repeated exposure.

Xylene:

Routes of exposure : inhalation (vapor)

Target Organs : Auditory system

Assessment : Shown to produce significant health effects in animals at concentrations of >0.2 to 1 mg/l/6h/d.

Ethylbenzene:

Routes of exposure : inhalation (vapor)

Target Organs : Auditory system

Assessment : Shown to produce significant health effects in animals at con-

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

centrations of >0.2 to 1 mg/l/6h/d.

Repeated dose toxicity**Components:****Toluene:**

Species : Rat
LOAEL : 1.875 mg/l
Application Route : inhalation (vapor)
Exposure time : 6 Months

Species : Rat
NOAEL : 625 mg/kg
Application Route : Ingestion
Exposure time : 13 Weeks

Xylene:

Species : Rat
LOAEL : > 0.2 - 1 mg/l
Application Route : inhalation (vapor)
Exposure time : 13 Weeks
Remarks : Based on data from similar materials

Species : Rat
LOAEL : 150 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Acetone:

Species : Rat
NOAEL : 900 mg/kg
LOAEL : 1,700 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Species : Rat
NOAEL : 45 mg/l
Application Route : inhalation (vapor)
Exposure time : 8 Weeks

Ethylbenzene:

Species : Rat
LOAEL : 0.868 mg/l
Application Route : inhalation (vapor)
Exposure time : 13 Weeks

Species : Rat
NOAEL : 75 mg/kg
LOAEL : 250 mg/kg
Application Route : Ingestion
Method : OECD Test Guideline 408

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

Methanol:

Species	: Rat
NOAEL	: 1.06 mg/l
Application Route	: inhalation (vapor)
Exposure time	: 90 Days

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Components:**Toluene:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Xylene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Acetone:

The substance or mixture causes concern owing to the assumption that it causes a human aspiration toxicity hazard.

Ethylbenzene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Experience with human exposure**Components:****Toluene:**

Inhalation	: Target Organs: Central nervous system Symptoms: Neurological disorders
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SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****Toluene:**

Toxicity to fish	: LC50 (Oncorhynchus kisutch (coho salmon)): 5.5 mg/l Exposure time: 96 h
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AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
 Date of first issue: 02/01/2018

Toxicity to daphnia and other aquatic invertebrates : EC50 (Ceriodaphnia dubia (water flea)): 3.78 mg/l
 Exposure time: 48 h

Toxicity to algae/aquatic plants : NOEC (Skeletonema costatum (marine diatom)): 10 mg/l
 Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus kisutch (coho salmon)): 1.39 mg/l
 Exposure time: 40 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Ceriodaphnia dubia (water flea)): 0.74 mg/l
 Exposure time: 7 d

Toxicity to microorganisms : EC50 (Nitrosomonas sp.): 84 mg/l
 Exposure time: 24 h

Xylene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 13.5 mg/l
 Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l
 Exposure time: 24 h
 Method: OECD Test Guideline 202
 Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EC50 (Skeletonema costatum (marine diatom)): 10 mg/l
 Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): > 0.1 - < 1 mg/l
 Exposure time: 35 d
 Method: OECD Test Guideline 210
 Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EL10 (Daphnia magna (Water flea)): > 1 - 10 mg/l
 Exposure time: 21 d
 Method: OECD Test Guideline 211
 Remarks: Based on data from similar materials

Toxicity to microorganisms : NOEC: > 100 mg/l
 Exposure time: 3 h
 Method: OECD Test Guideline 209
 Remarks: Based on data from similar materials

Acetone:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5,540 mg/l
 Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 8,800 mg/l
 Exposure time: 48 h

Toxicity to algae/aquatic plants : NOEC (Pseudokirchneriella subcapitata (green algae)): 7,000 mg/l
 Exposure time: 96 h

AIR INTAKE SYSTEM CLEANER, 425 g

Version 3.3 Revision Date: 06/09/2022 SDS Number: 10789994-00006 Date of last issue: 09/16/2021
Date of first issue: 02/01/2018

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): \geq 79 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50: 61,150 mg/l
Exposure time: 30 min
Method: ISO 8192

Ethylbenzene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.8 - 2.4 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 3.6 mg/l
Exposure time: 96 h

NOEC (Pseudokirchneriella subcapitata (green algae)): 3.4 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Ceriodaphnia dubia (water flea)): 0.96 mg/l
Exposure time: 7 d

Toxicity to microorganisms : EC50 (Nitrosomonas sp.): 96 mg/l
Exposure time: 24 h

Carbon dioxide:

Toxicity to fish : NOEC (Lepomis macrochirus (Bluegill sunfish)): > 100 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : NOEC (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Remarks: Based on data from similar materials

Methanol:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 22,000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 201

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

Toxicity to fish (Chronic toxicity) : NOEC (Oryzias latipes (Orange-red killifish)): 15,800 mg/l
Exposure time: 200 h

Toxicity to microorganisms : IC50: > 1,000 mg/l
Exposure time: 3 h

Persistence and degradability**Components:****Toluene:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 80 %
Exposure time: 20 d

Xylene:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 70 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

Acetone:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 91 %
Exposure time: 28 d

Ethylbenzene:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 70 - 80 %
Exposure time: 28 d

Methanol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 95 %
Exposure time: 20 d

Bioaccumulative potential**Components:****Toluene:**

Bioaccumulation : Species: Leuciscus idus (Golden orfe)
Bioconcentration factor (BCF): 90

Partition coefficient: n-octanol/water : log Pow: 2.73

Xylene:

Partition coefficient: n-octanol/water : log Pow: 3.16
Remarks: Calculation

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

Acetone:

Partition coefficient: n-octanol/water : log Pow: -0.27 - -0.23

Ethylbenzene:

Partition coefficient: n-octanol/water : log Pow: 3.6

Carbon dioxide:

Partition coefficient: n-octanol/water : log Pow: 0.83

Methanol:

Bioaccumulation : Species: Leuciscus idus (Golden orfe)
Bioconcentration factor (BCF): < 10

Partition coefficient: n-octanol/water : log Pow: -0.77

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Empty containers retain residue and can be dangerous.
Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.
If not otherwise specified: Dispose of as unused product.
Please ensure aerosol cans are sprayed completely empty (including propellant)

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

UN number	: UN 1950
Proper shipping name	: AEROSOLS
Class	: 2.1
Packing group	: Not assigned by regulation

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

Labels : 2.1

IATA-DGR

UN/ID No. : UN 1950
 Proper shipping name : Aerosols, flammable
 Class : 2.1
 Packing group : Not assigned by regulation
 Labels : Flammable Gas
 Packing instruction (cargo aircraft) : 203
 Packing instruction (passenger aircraft) : 203

IMDG-Code

UN number : UN 1950
 Proper shipping name : AEROSOLS

Class : 2.1
 Packing group : Not assigned by regulation
 Labels : 2.1
 EmS Code : F-D, S-U
 Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation
TDG

UN number : UN 1950
 Proper shipping name : AEROSOLS

Class : 2.1
 Packing group : Not assigned by regulation
 Labels : 2.1
 ERG Code : 126
 Marine pollutant : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

Volatile organic compounds (VOC) content : CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999 - Guidelines for VOC in Consumer Products
 VOC content: 75 % / 660 g/l

The ingredients of this product are reported in the following inventories:

DSL : All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	:	Canada. British Columbia OEL
CA QC OEL	:	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
CA AB OEL / TWA	:	8-hour Occupational exposure limit
CA AB OEL / STEL	:	15-minute occupational exposure limit
CA BC OEL / TWA	:	8-hour time weighted average
CA BC OEL / STEL	:	short-term exposure limit
CA QC OEL / TWA EV	:	Time-weighted average exposure value
CA QC OEL / STEV	:	Short-term exposure value

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Sources of key data used to compile the Material Safety : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

AIR INTAKE SYSTEM CLEANER, 425 g

Version	Revision Date:	SDS Number:	Date of last issue: 09/16/2021
3.3	06/09/2022	10789994-00006	Date of first issue: 02/01/2018

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CA / Z8