

**ROST OFF ICE, Freezing rust releaser, 244 g**

Version 7.2      Revision Date: 05/22/2023      SDS Number: 10656880-00009      Date of last issue: 11/15/2022  
Date of first issue: 12/23/2009

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**SECTION 1. IDENTIFICATION**

Product name : ROST OFF ICE, Freezing rust releaser, 244 g  
Product code : 893.240  
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 : Detergent  
Cleaning agent  
  
Restrictions on use : Not applicable

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**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  
Reproductive toxicity : Category 2

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Specific target organ toxicity : Category 3  
- single exposure

Simple Asphyxiant : 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.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.  
May displace oxygen and cause rapid suffocation.

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.  
P261 Avoid breathing 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:**

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.  
P308 + P313 IF exposed or concerned: Get medical attention.  
P332 + P313 If skin irritation occurs: 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.

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**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Components**

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Isobutane	Propane, 2-methyl-	75-28-5	$\geq 30 - < 60$ *
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	Naphtha (petroleum), hydrotreated light	92128-66-0	$\geq 5 - < 10$ *
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Heptane, branched, cyclic and linear	64742-49-0	$\geq 5 - < 10$ *
Propane	Dimethylmethane	74-98-6	$\geq 5 - < 10$ *
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Naphtha, hydrotreated heavy	64742-48-9	$\geq 1 - < 5$ *
Butane	Butyl hydride	106-97-8	$\geq 1 - < 5$ *
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Distillates (petroleum), hydrotreated light	64742-47-8	$\geq 1 - < 5$ *
n-Hexane	Hexyl hydride	110-54-3	$\geq 0.1 - < 1$ *
Methyl salicylate	Methyl 2-hydroxybenzoate	119-36-8	$\geq 0.1 - < 1$ *

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

**Alternative CAS Numbers for some regions**

Chemical name	Alternative CAS Number(s)
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	64742-49-0

**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.  
 If not breathing, give artificial respiration.  
 If breathing is difficult, give oxygen.  
 Get medical attention immediately.

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- 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.
- In case of eye contact : Flush eyes with water as a precaution.  
Get medical attention if irritation develops and persists.
- If swallowed : If swallowed, DO NOT induce vomiting.  
Get medical attention.  
Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : Causes skin irritation.  
May cause drowsiness or dizziness.  
Suspected of damaging fertility. Suspected of damaging the unborn child.  
Gas reduces oxygen available for breathing.
- 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.

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**SECTION 5. FIRE-FIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : None known.
- 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 : In the event of fire, wear self-contained breathing apparatus.



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assessment

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 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 : 10 - < 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
Isobutane	75-28-5	TWA	1,000 ppm	CA AB OEL
		TWA	1,000 ppm	CA BC OEL
		STEL	1,000 ppm	ACGIH
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	92128-66-0	TWA (Mist)	5 mg/m <sup>3</sup>	CA AB OEL
		STEL (Mist)	10 mg/m <sup>3</sup>	CA AB OEL
		TWAEV (Mist)	5 mg/m <sup>3</sup>	CA QC OEL
		STEV (Mist)	10 mg/m <sup>3</sup>	CA QC OEL
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	64742-49-0	TWA	400 ppm	CA BC OEL
		STEL	500 ppm	CA BC OEL
		TWA	400 ppm 1,640 mg/m <sup>3</sup>	CA AB OEL
		STEL	500 ppm 2,050 mg/m <sup>3</sup>	CA AB OEL

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		TWAEV (Mist)	5 mg/m <sup>3</sup>	CA QC OEL
		STEV (Mist)	10 mg/m <sup>3</sup>	CA QC OEL
		TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
Propane	74-98-6	TWA	1,000 ppm	CA AB OEL
		TWAEV	1,000 ppm 1,800 mg/m <sup>3</sup>	CA QC OEL
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	64742-48-9	TWA (Mist)	5 mg/m <sup>3</sup>	CA AB OEL
		STEL (Mist)	10 mg/m <sup>3</sup>	CA AB OEL
		TWAEV (Mist)	5 mg/m <sup>3</sup>	CA QC OEL
		STEV (Mist)	10 mg/m <sup>3</sup>	CA QC OEL
		TWA (Mist)	1 mg/m <sup>3</sup>	CA BC OEL
		TWA	525 mg/m <sup>3</sup>	CA ON OEL
		TWA (Inhalable particulate matter)	5 mg/m <sup>3</sup>	ACGIH
Butane	106-97-8	TWA	1,000 ppm	CA AB OEL
		TWAEV	800 ppm 1,900 mg/m <sup>3</sup>	CA QC OEL
		TWA	1,000 ppm	CA BC OEL
		STEL	1,000 ppm	ACGIH
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	64742-47-8	TWA	200 mg/m <sup>3</sup> (total hydrocarbon vapor)	CA BC OEL
		TWA (Mist)	5 mg/m <sup>3</sup>	CA AB OEL
		STEL (Mist)	10 mg/m <sup>3</sup>	CA AB OEL
		TWAEV (Mist)	5 mg/m <sup>3</sup>	CA QC OEL
		STEV (Mist)	10 mg/m <sup>3</sup>	CA QC OEL
		TWA	525 mg/m <sup>3</sup>	CA ON OEL
n-Hexane	110-54-3	TWA	50 ppm 176 mg/m <sup>3</sup>	CA AB OEL
		TWA	20 ppm	CA BC OEL
		TWAEV	50 ppm 176 mg/m <sup>3</sup>	CA QC OEL
		TWA	50 ppm	ACGIH

**Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
n-Hexane	110-54-3	2,5-Hexanedione	Urine	End of shift	0.5 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

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only in an area equipped with explosion-proof exhaust ventilation.

**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
- Break through time : 480 min
- Glove thickness : 0.45 mm
- 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.
- Eye protection : Wear the following personal protective equipment:  
Safety glasses
- 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.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : aerosol
- Propellant : Isobutane, Propane, Butane
- Color : light brown



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Odor : characteristic

Odor Threshold : No data available

pH : substance/mixture is non-soluble (in water)

Melting point/freezing point : No data available

Initial boiling point and boiling range : -40 °C

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : Extremely flammable aerosol.

Upper explosion limit / Upper flammability limit : 11 %(V)

Lower explosion limit / Lower flammability limit : 1 %(V)

Vapor pressure : Not applicable

Relative vapor density : Not applicable

Density : 0.738 g/cm<sup>3</sup> (20 °C)

Solubility(ies)  
Water solubility : insoluble

Partition coefficient: n-octanol/water : Not applicable

Autoignition temperature : ca. 200 °C

Decomposition temperature : No data available

Viscosity  
Viscosity, kinematic : < 7 mm<sup>2</sup>/s

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle size : Not applicable

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**SECTION 10. STABILITY AND REACTIVITY**

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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. 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.

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

Acute inhalation toxicity	:	LC50 (Mouse): 260200 ppm Exposure time: 4 h Test atmosphere: gas
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**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 25.2 mg/l Exposure time: 4 h Test atmosphere: vapor
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Acute oral toxicity	:	LD50 (Rat): > 5,840 mg/kg Remarks: Based on data from similar materials
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Acute inhalation toxicity : LC50 (Rat): > 23.3 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2,800 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on data from similar materials

**Propane:**

Acute inhalation toxicity : LC50 (Rat): > 800000 ppm  
Exposure time: 15 min  
Test atmosphere: gas

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 4,951 mg/m<sup>3</sup>  
Exposure time: 4 h  
Test atmosphere: vapor  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on data from similar materials

**Butane:**

Acute inhalation toxicity : LC50 (Rat): 658 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor

**Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 5.6 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Remarks: Based on data from similar materials

**n-Hexane:**

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

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Acute inhalation toxicity : LC50 (Rat): > 31.86 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

**Methyl salicylate:**

Acute oral toxicity : LD50 (Rat): 890 mg/kg

**Skin corrosion/irritation**

Causes skin irritation.

**Components:****Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : Skin irritation

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Species : Rabbit  
Result : Skin irritation  
Remarks : Based on data from similar materials

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Species : Rabbit  
Result : Mild skin irritation

Assessment : Repeated exposure may cause skin dryness or cracking.

**Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

Species : Rabbit  
Result : No skin irritation  
Remarks : Based on data from similar materials

Assessment : Repeated exposure may cause skin dryness or cracking.

**n-Hexane:**

Species : Rabbit  
Result : Skin irritation  
Remarks : Based on data from similar materials

**Methyl salicylate:**

Species : Rabbit  
Method : OECD Test Guideline 404

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Result : No skin irritation

**Serious eye damage/eye irritation**

Not classified based on available information.

**Components:****Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Species : Rabbit  
Result : No eye irritation

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Species : Rabbit  
Result : No eye irritation  
Remarks : Based on data from similar materials

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Species : Rabbit  
Result : No eye irritation  
Method : OECD Test Guideline 405  
Remarks : Based on data from similar materials

**Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

Species : Rabbit  
Result : No eye irritation  
Remarks : Based on data from similar materials

**n-Hexane:**

Species : Rabbit  
Result : No eye irritation

**Methyl salicylate:**

Species : Tissue Culture  
Method : OECD Test Guideline 491  
Result : Irreversible effects on the eye

**Respiratory or skin sensitization****Skin sensitization**

Not classified based on available information.

**Respiratory sensitization**

Not classified based on available information.

**Components:****Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Test Type : Buehler Test  
Routes of exposure : Skin contact  
Species : Guinea pig

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Result : negative

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Test Type : Maximization Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Result : negative  
Remarks : Based on data from similar materials

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Test Type : Maximization Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Result : negative  
Remarks : Based on data from similar materials

**Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

Test Type : Maximization Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Result : negative  
Remarks : Based on data from similar materials

**n-Hexane:**

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

**Methyl salicylate:**

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

Assessment : Probability or evidence of low to moderate skin sensitization rate in humans

**Germ cell mutagenicity**

Not classified based on available information.

**Components:****Isobutane:**

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: negative  
Remarks: Based on data from similar materials

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

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Species: Rat  
Application Route: inhalation (gas)  
Method: OECD Test Guideline 474  
Result: negative  
Remarks: Based on data from similar materials

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

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

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
cytogenetic assay)  
Species: Rat  
Application Route: inhalation (vapor)  
Method: OPPTS 870.5395  
Result: negative

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro  
Result: negative  
Remarks: Based on data from similar materials

Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on data from similar materials

Test Type: In vitro mammalian cell gene mutation test  
Method: OECD Test Guideline 476  
Result: negative  
Remarks: Based on data from similar materials

**Propane:**

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

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
cytogenetic assay)  
Species: Rat  
Application Route: inhalation (gas)  
Method: OECD Test Guideline 474  
Result: negative

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test  
Result: negative  
Remarks: Based on data from similar materials

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

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**Butane:**

- Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative
- Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Rat  
Application Route: inhalation (gas)  
Method: OECD Test Guideline 474  
Result: negative  
Remarks: Based on data from similar materials

**Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

- Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative  
Remarks: Based on data from similar materials

**n-Hexane:**

- 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  
Method: OECD Test Guideline 476  
Result: negative
- Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)  
Species: Mouse  
Application Route: inhalation (vapor)  
Result: negative
- Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on data from similar materials

**Methyl salicylate:**

- Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro  
Result: negative
- Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

**Carcinogenicity**

Not classified based on available information.



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**Components:****Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Species                                : Mouse  
Application Route                    : Skin contact  
Exposure time                        : 102 weeks  
Result                                    : negative

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Species                                : Rat  
Application Route                    : inhalation (vapor)  
Exposure time                        : 105 weeks  
Result                                    : negative  
Remarks                                : Based on data from similar materials

**n-Hexane:**

Species                                : Mouse  
Application Route                    : inhalation (vapor)  
Exposure time                        : 2 Years  
Method                                  : OECD Test Guideline 451  
Result                                    : negative  
Remarks                                : Based on data from similar materials

**Methyl salicylate:**

Species                                : Rat  
Application Route                    : Ingestion  
Exposure time                        : 2 Years  
Result                                    : negative

**Reproductive toxicity**

Suspected of damaging fertility. Suspected of damaging the unborn child.

**Components:****Isobutane:**

Effects on fertility                    : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
Species: Rat  
Application Route: Inhalation  
Method: OECD Test Guideline 422  
Result: negative

Effects on fetal development        : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
Species: Rat  
Application Route: inhalation (gas)  
Method: OECD Test Guideline 422  
Result: negative

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Effects on fertility                    : Test Type: Two-generation reproduction toxicity study  
Species: Rat

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Application Route: inhalation (vapor)  
Result: negative

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

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Fertility/early embryonic development  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on data from similar materials

**Propane:**

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
Species: Rat  
Application Route: inhalation (gas)  
Method: OECD Test Guideline 422  
Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
Species: Rat  
Application Route: inhalation (gas)  
Method: OECD Test Guideline 422  
Result: negative

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening test  
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  
Remarks: Based on data from similar materials

**Butane:**

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test

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Species: Rat  
 Application Route: inhalation (gas)  
 Method: OECD Test Guideline 422  
 Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
 Application Route: inhalation (gas)  
 Method: OECD Test Guideline 422  
 Result: negative

**n-Hexane:**

Effects on fertility : Test Type: Fertility/early embryonic development  
 Application Route: inhalation (vapor)  
 Result: positive

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

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

**Methyl salicylate:**

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

Effects on fetal development : Test Type: Embryo-fetal development  
 Species: Rat  
 Application Route: Ingestion  
 Result: positive  
 Remarks: Based on data from similar materials

Test Type: Embryo-fetal development  
 Species: Monkey  
 Application Route: Ingestion  
 Result: positive  
 Remarks: Based on data from similar materials

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

**STOT-single exposure**

May cause drowsiness or dizziness.

**Components:**
**Isobutane:**

Assessment : May cause drowsiness or dizziness.

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**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Assessment : May cause drowsiness or dizziness.

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Assessment : May cause drowsiness or dizziness.

**Propane:**

Assessment : May cause drowsiness or dizziness.

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Assessment : May cause drowsiness or dizziness.

**Butane:**

Assessment : May cause drowsiness or dizziness.

**n-Hexane:**

Assessment : May cause drowsiness or dizziness.

**STOT-repeated exposure**

Not classified based on available information.

**Components:****n-Hexane:**

Routes of exposure : inhalation (vapor)  
Target Organs : Central nervous system  
Assessment : May cause damage to organs through prolonged or repeated exposure.

**Repeated dose toxicity****Components:****Isobutane:**

Species : Rat  
NOAEL : 9000 ppm  
Application Route : inhalation (gas)  
Exposure time : 6 Weeks  
Method : OECD Test Guideline 422

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Species : Rat  
NOAEL : > 20 mg/l  
Application Route : inhalation (vapor)  
Exposure time : 13 Weeks

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Species : Rat  
NOAEL : 12.47 mg/l

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Application Route      : Inhalation  
Exposure time         : 90 Days  
Remarks                : Based on data from similar materials

**Propane:**

Species                 : Rat  
NOAEL                  : 7.214 mg/l  
Application Route     : inhalation (gas)  
Exposure time         : 6 Weeks  
Method                 : OECD Test Guideline 422

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Species                 : Rat  
NOAEL                  : 10,186 mg/m<sup>3</sup>  
Application Route     : inhalation (vapor)  
Exposure time         : 13 Weeks

**Butane:**

Species                 : Rat  
NOAEL                  : 9000 ppm  
Application Route     : inhalation (gas)  
Exposure time         : 6 Weeks  
Method                 : OECD Test Guideline 422

**n-Hexane:**

Species                 : Mouse  
LOAEL                  : 1.76 mg/l  
Application Route     : inhalation (vapor)  
Exposure time         : 13 Weeks

Species                 : Rat, male  
NOAEL                  : 568 mg/kg  
LOAEL                  : 3,973 mg/kg  
Application Route     : Ingestion  
Exposure time         : 90 Days

**Methyl salicylate:**

Species                 : Rat  
NOAEL                  : 50 mg/kg  
LOAEL                  : 250 mg/kg  
Application Route     : Ingestion  
Exposure time         : 2 y

**Aspiration toxicity**

Not classified based on available information.

**Components:****Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

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.

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**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

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.

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

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.

**Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

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.

**n-Hexane:**

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:**
**n-Hexane:**

Inhalation : Target Organs: Central nervous system  
Symptoms: Central nervous system depression

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**SECTION 12. ECOLOGICAL INFORMATION**
**Ecotoxicity**
**Components:**
**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): 8.2 mg/l  
Exposure time: 96 h  
Test substance: Water Accommodated Fraction

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 4.5 mg/l  
aquatic invertebrates : Exposure time: 48 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 202  
Remarks: Based on data from similar materials

Toxicity to algae/aquatic : EL50 (Pseudokirchneriella subcapitata (green algae)): 3.1  
plants : mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

NOELR (Pseudokirchneriella subcapitata (green algae)): 0.5

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mg/l  
 Exposure time: 72 h  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 201  
 Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR (Daphnia magna (Water flea)): 2.6 mg/l  
 Exposure time: 21 d  
 Method: OECD Test Guideline 211

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 13.4 mg/l  
 Exposure time: 96 h  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 203  
 Remarks: No toxicity at the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 3 mg/l  
 Exposure time: 48 h  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 202  
 Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EL50 (Selenastrum capricornutum (green algae)): > 10 - 100 mg/l  
 Exposure time: 72 h  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 201  
 Remarks: Based on data from similar materials

NOELR (Selenastrum capricornutum (green algae)): 0.1 mg/l  
 Exposure time: 72 h  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 201  
 Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.17 mg/l  
 Exposure time: 21 d  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 211  
 Remarks: Based on data from similar materials

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 10 - 30 mg/l  
 Exposure time: 96 h  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 203  
 Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 22 - 46 mg/l  
 Exposure time: 48 h  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 202  
 Remarks: Based on data from similar materials

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Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

NOELR (Pseudokirchneriella subcapitata (green algae)): 1 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

**Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l  
Exposure time: 96 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 203  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 1,000 mg/l  
Exposure time: 48 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 202  
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

NOELR (Pseudokirchneriella subcapitata (green algae)): 1,000 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

**n-Hexane:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 2.5 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 3.88 mg/l  
Exposure time: 48 h  
Test substance: Water Accommodated Fraction

Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): 55 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201



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Remarks: Based on data from similar materials

NOEL (Pseudokirchneriella subcapitata (green algae)): 30 mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

**Methyl salicylate:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 10 - 100 mg/l

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 1.6 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Desmodesmus subspicatus (green algae)): 0.79 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC10 (Pseudomonas putida): 140 mg/l

Exposure time: 16 h

**Persistence and degradability****Components:****Isobutane:**

Biodegradability : Result: Readily biodegradable.

Biodegradation: 100 %

Exposure time: 385.5 h

Remarks: Based on data from similar materials

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Biodegradability : Result: Readily biodegradable.

Biodegradation: 77.05 %

Exposure time: 28 d

Method: OECD Test Guideline 301F

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301F

Remarks: Based on data from similar materials

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**Propane:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 100 %  
Exposure time: 385.5 h  
Remarks: Based on data from similar materials

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics ,<2% aromatics:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 89 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F  
Remarks: Based on data from similar materials

**Butane:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 100 %  
Exposure time: 385.5 h  
Remarks: Based on data from similar materials

**Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 67.6 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F  
Remarks: Based on data from similar materials

**n-Hexane:**

Biodegradability : Result: Readily biodegradable.  
Method: OECD Test Guideline 301F  
Remarks: Based on data from similar materials

**Methyl salicylate:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 98.4 %  
Exposure time: 28 d

**Bioaccumulative potential****Components:****Isobutane:**

Partition coefficient: n-octanol/water : log Pow: 2.8

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:**

Partition coefficient: n-octanol/water : log Pow: 4  
Remarks: Based on data from similar materials

**Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:**

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Partition coefficient: n-octanol/water : log Pow: > 4  
Remarks: Based on data from similar materials

**Butane:**

Partition coefficient: n-octanol/water : log Pow: 2.31

**n-Hexane:**

Partition coefficient: n-octanol/water : log Pow: 4

**Methyl salicylate:**

Partition coefficient: n-octanol/water : log Pow: 2.55

**Mobility in soil**

No data available

**Other adverse effects**

No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

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

Do not dispose of waste into sewer.

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)

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

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

**IATA-DGR**

UN/ID No. : UN 1950

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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.

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**SECTION 15. REGULATORY INFORMATION****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 ON OEL                   : Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.  
CA QC OEL                   : Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for air-

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	borne 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 ON OEL / TWA	: Time-Weighted Average Limit (TWA)
CA QC OEL / TWAEV	: 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 Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 05/22/2023  
Date format : mm/dd/yyyy

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

**ROST OFF ICE, Freezing rust releaser, 244 g**

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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.

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