



## 1 Identification

- **Product identifier**
- **Trade name:** Roth Rattle Bomb Aerosol
- **Article codes:** RBF, RBB, RBSB, RBK, RVB, RBP
- **Application of the substance / the mixture** Coating
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Lil' Daddy Roth Metal Flake, LLC  
5660 Boscell Common  
Fremont, CA 94538  
415-663-5253
- **Information department:**  
vincent@rothmetalflake.com : Lil' Daddy Roth Metal Flake, LLC 5660 Boscell Common Fremont CA 94538 :  
phone 1-415-663-5253, M - F 9am - 4pm PST
- **Emergency telephone number:** CHEMTREC 1-800-424-9300

## \* 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 GHS04 Flame, Gas cylinder

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02 GHS04 GHS07

- **Signal word** Danger

- **Hazard-determining components of labeling:**

acetone

butanone

- **Hazard statements**

H222 Extremely flammable aerosol.

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H280 Contains gas under pressure; may explode if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

**Precautionary statements**

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

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection / face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a poison center/doctor if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:****NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 4

Reactivity = 3

**HMIS-ratings (scale 0 - 4)**

Health = 2

Fire = 4

Reactivity = 3

**Other hazards****Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.**3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:**

Mixture: consisting of the following components.

Weight percentages

**Dangerous components:**

|         |          |         |
|---------|----------|---------|
| 67-64-1 | acetone  | 60-70%  |
| 74-98-6 | propane  | 13-30%  |
| 78-93-3 | butanone | ≥7-<10% |

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763-69-9 ethyl 3-ethoxypropionate

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≥0.1-≤1%

#### 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

#### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

#### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

##### · PAC-1:

|          |                          |           |
|----------|--------------------------|-----------|
| 67-64-1  | acetone                  | 200 ppm   |
| 74-98-6  | propane                  | 5500* ppm |
| 78-93-3  | butanone                 | 200 ppm   |
| 763-69-9 | ethyl 3-ethoxypropionate | 1.6 ppm   |

##### · PAC-2:

|          |                          |             |
|----------|--------------------------|-------------|
| 67-64-1  | acetone                  | 3200* ppm   |
| 74-98-6  | propane                  | 17000** ppm |
| 78-93-3  | butanone                 | 2700* ppm   |
| 763-69-9 | ethyl 3-ethoxypropionate | 18 ppm      |

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| · PAC-3: |                          |              |
|----------|--------------------------|--------------|
| 67-64-1  | acetone                  | 5700* ppm    |
| 74-98-6  | propane                  | 33000*** ppm |
| 78-93-3  | butanone                 | 4000* ppm    |
| 763-69-9 | ethyl 3-ethoxypropionate | 110 ppm      |

## 7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

No special measures required.

- **Information about protection against explosions and fires:**

Do not spray on a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

- **Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Observe official regulations on storing packagings with pressurized containers.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:** Keep receptacle tightly sealed.

- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

| 67-64-1 acetone  |  |
|------------------|--|
| PEL              | Long-term value: 2400 mg/m <sup>3</sup> , 1000 ppm |
| REL              | Long-term value: 590 mg/m <sup>3</sup> , 250 ppm   |
| TLV              | Short-term value: 1187 mg/m <sup>3</sup> , 500 ppm |
|                  | Long-term value: 594 mg/m <sup>3</sup> , 250 ppm   |
|                  | BEI  |
| 74-98-6 propane  |  |
| PEL              | Long-term value: 1800 mg/m <sup>3</sup> , 1000 ppm |
| REL              | Long-term value: 1800 mg/m <sup>3</sup> , 1000 ppm |
| TLV              | refer to Appendix F in TLVs&BEIs book; D, EX       |
| 78-93-3 butanone |  |
| PEL              | Long-term value: 590 mg/m <sup>3</sup> , 200 ppm   |

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|     |  |
|-----|--|
| REL | Short-term value: 885 mg/m <sup>3</sup> , 300 ppm<br>Long-term value: 590 mg/m <sup>3</sup> , 200 ppm        |
| TLV | Short-term value: 885 mg/m <sup>3</sup> , 300 ppm<br>Long-term value: 590 mg/m <sup>3</sup> , 200 ppm<br>BEI |

· **Ingredients with biological limit values:**

**67-64-1 acetone**

|     |  |
|-----|--|
| BEI | 50 mg/L<br>Medium: urine<br>Time: end of shift<br>Parameter: Acetone (nonspecific) |
|-----|--|

**78-93-3 butanone**

|     |   |
|-----|---|
| BEI | 2 mg/L<br>Medium: urine<br>Time: end of shift<br>Parameter: MEK |
|-----|---|

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

· **Breathing equipment:** Not required.

· **Protection of hands:**

- Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

- The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

- Safety glasses



Tightly sealed goggles



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## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

**Form:** Aerosol  
**Color:** According to product specification

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

#### · Change in condition

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** -44.5 °C

· **Flash point:** -97 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 465 °C

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.

#### · Explosion limits:

**Lower:** 1.7 Vol %

**Upper:** 13 Vol %

· **Vapor pressure at 20 °C:** 8,300 hPa

· **Density at 20 °C:** 0.69578 g/cm<sup>3</sup>

· **Relative density:** Not determined.

· **Vapor density:** Not determined.

· **Evaporation rate:** Not applicable.

#### · Solubility in / Miscibility with

**Water:** Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

#### · Viscosity:

**Dynamic:** Not determined.

**Kinematic:** Not determined.

#### · Solvent content:

**Organic solvents:** 100.0 %

**VOC content:** 35.00 %

569.6 g/l / 4.75 lb/gal

**Solids content:** 0.0 %

· **Other information:** No further relevant information available.

## 10 Stability and reactivity

· **Reactivity:** No further relevant information available.

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- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

67-64-1 acetone

Oral LD50 5,800 mg/kg (rat)

Dermal LD50 20,000 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## \* 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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· **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1950
- **UN proper shipping name**
- **DOT** Aerosols, flammable
- **ADR** 1950 Aerosols
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable

- **Transport hazard class(es)**

- **DOT**



- **Class** 2.1
- **Label** 2.1

- **ADR**



- **Class** 2 5F Gases
- **Label** 2.1

- **IMDG, IATA**



- **Class** 2.1
- **Label** 2.1

- **Packing group**

- **DOT, ADR, IMDG, IATA** Void

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|  |   |
|--|---|
| · <b>Environmental hazards:</b>  |   |
| · <b>Marine pollutant:</b>   | No  |
| · <b>Special precautions for user</b>  | Warning: Gases  |
| · <b>EMS Number:</b>   | F-D,S-U   |
| · <b>Stowage Code</b>  | SW1 Protected from sources of heat.<br>SW22 For AEROSOLS with a maximum capacity of 1 litre:<br>Category A. For AEROSOLS with a capacity above 1 litre:<br>Category B. For WASTE AEROSOLS: Category C, Clear of living<br>quarters.   |
| · <b>Segregation Code</b>  | SG69 For AEROSOLS with a maximum capacity of 1 litre:<br>Segregation as for class 9. Stow "separated from" class 1 except for<br>division 1.4. For AEROSOLS with a capacity above 1 litre:<br>Segregation as for the appropriate subdivision of class 2. For<br>WASTE AEROSOLS: Segregation as for the appropriate subdivision<br>of class 2. |
| · <b>Transport in bulk according to Annex II of<br/>MARPOL73/78 and the IBC Code</b> | Not applicable.   |
| · <b>Transport/Additional information:</b>   |   |
| · <b>DOT</b>   |   |
| · <b>Quantity limitations</b>  | On passenger aircraft/rail: 75 kg<br>On cargo aircraft only: 150 kg   |
| · <b>ADR</b>   |   |
| · <b>Excepted quantities (EQ)</b>  | Code: E0<br>Not permitted as Excepted Quantity  |
| · <b>IMDG</b>  |   |
| · <b>Limited quantities (LQ)</b>   | 1L  |
| · <b>Excepted quantities (EQ)</b>  | Code: E0<br>Not permitted as Excepted Quantity  |
| · <b>UN "Model Regulation":</b>  | UN 1950 AEROSOLS, 2.1   |

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

78-93-3 butanone

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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USA



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· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

|         |          |   |
|---------|----------|---|
| 67-64-1 | acetone  | I |
| 78-93-3 | butanone | I |

· **TLV (Threshold Limit Value established by ACGIH)**

|         |         |    |
|---------|---------|----|
| 67-64-1 | acetone | A4 |
|---------|---------|----|

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02   GHS04   GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**

acetone

butanone

· **Hazard statements**

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

· **Precautionary statements**

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

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection / face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a poison center/doctor if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

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USA



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P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environment protection department.

· **Contact:** Vincent Tamer (vincent@rothmetalflake.com)

· **Date of preparation / last revision** 03/14/2018 / 7

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Aerosol 1: Aerosols – Category 1

Press. Gas: Gases under pressure – Compressed gas

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· **\* Data compared to the previous version altered.**