

Reviewed on 09/05/2018

## **1** Identification

- · Product identifier
- · Trade name: SR-2000
- · CAS Number:
- 67-64-1
- *EC number:* 200-662-2
- Index number: 606-001-00-8
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Chemical Consultants Inc. 1850 Wild Turkey Circle Corona, CA 92880 USA +1 (951) 735-5511 ncollins@ccidom.com
- Information department: Product safety department • Emergency telephone number: INFOTRAC 1-800-535-5053

## 2 Hazard(s) identification

· Classification of the substance or mixture



Flam. Liq. 2 H225 Highly flammable liquid and vapor.



Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

· Label elements

• *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



· Signal word Danger

Hazard-determining components of labeling: acetone heptane
Hazard statements H225 Highly flammable liquid and vapor. 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.



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|                 | (Contd. of page 1)  |
|-----------------|---|
| P240            | Ground/bond container and receiving equipment.  |
| P241            | Use explosion-proof electrical/ventilating/lighting/equipment.                                      |
| P242            | Use only non-sparking tools.  |
| P243            | Take precautionary measures against static discharge.   |
| 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 protective gloves/protective clothing/eye protection/face protection.                          |
|                 | 353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/    |
|                 | shower.   |
| P304+P340       | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                          |
| P305+P351+P     | 338 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.   |
| P370+P378       | In case of fire: Use for extinction: CO2, powder or water spray.                                    |
| P403+P233       | Store in a well-ventilated place. Keep container tightly closed.                                    |
| P403+P235       | Store in a well-ventilated place. Keep cool.  |
| P405            | Store locked up.  |
| P501            | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| • Other hazards |   |
| Degulta of DDT  | and DD account at   |

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.

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

- · Chemical characterization: Substances
- · CAS No. Description
- 67-64-1 acetone
- Identification number(s)
- EC number: 200-662-2
- Index number: 606-001-00-8
- · Dangerous components:

142-82-5 heptane

#### 4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · 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.

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## Safety Data Sheet acc. to OSHA HCS



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#### • *Indication of any immediate medical attention and special treatment needed No further relevant information available.*

**5** Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- 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: For large spills: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

- *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   |
| 142-82-5 heptane | 500 ppm   |
| · PAC-2:         |           |
| 67-64-1 acetone  | 3200* ppm |
| 142-82-5 heptane | 830 ppm   |
| · PAC-3:         |           |
| 67-64-1 acetone  | 5700* ppm |
| 142-82-5 heptane | 5000* ppm |

### 7 Handling and storage

· Handling:

- *Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.*
- Prevent formation of aerosols.
- · Information about protection against explosions and fires:
- Keep ignition sources away Do not smoke.
- Protect against electrostatic charges.

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- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.
- 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 la | imit values that | require | monitoring | at the wor | rkplace: |
|----------------------|------------------|---------|------------|------------|----------|
|----------------------|------------------|---------|------------|------------|----------|

#### 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

#### 142-82-5 heptane

- PEL Long-term value: 2000 mg/m<sup>3</sup>, 500 ppm
- REL Long-term value: 350 mg/m<sup>3</sup>, 85 ppm Ceiling limit value: 1800\* mg/m<sup>3</sup>, 440\* ppm \*15-min
- TLV Short-term value: 2050 mg/m<sup>3</sup>, 500 ppm Long-term value: 1640 mg/m<sup>3</sup>, 400 ppm

#### · Ingredients with biological limit values:

#### 67-64-1 acetone

- BEI 50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
- · 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:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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· Protection of hands:

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Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

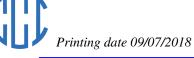
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation • Material of gloves

- 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.
- $\cdot$  Penetration time of glove material
- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- · Eye protection:



Tightly sealed goggles

| Information on basic physical and c | hemical properties  |
|-------------------------------------|---|
| General Information                 |   |
| Appearance:                         |   |
| Form:                               | Fluid   |
| Color:<br>Odor:                     | Colorless<br>Characteristic   |
| Odor threshold:                     | Not determined.   |
| pH-value:                           | Not determined.   |
| Change in condition                 |   |
| Melting point/Melting range:        | -94.7 °C (-138.5 °F)  |
| <b>Boiling point/Boiling range:</b> | 55.8-56.6 °C (132.4-133.9 °F)   |
| Flash point:                        | <-18 °C (<-0.4 °F)  |
| Flammability (solid, gaseous):      | Not applicable.   |
| Ignition temperature:               | 465 °C (869 °F)   |
| Decomposition temperature:          | Not determined.   |
| Auto igniting:                      | Not determined.   |
| Danger of explosion:                | Product is not explosive. However, formation of explosive air/vapo mixtures are possible. |
| Explosion limits:                   |   |
| Lower:                              | 2.6 Vol %   |
| Upper:                              | 13 Vol %  |
| Vapor pressure at 20 °C (68 °F):    | 233 hPa (174.8 mm Hg)   |
| Density at 20 °C (68 °F):           | 0.7856 g/cm³ (6.55583 lbs/gal)  |



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|                                       | (Contd. of p                               | age : |
|---------------------------------------|--|-------|
| · Relative density                    | Not determined.                            |       |
| · Vapor density                       | Not determined.                            |       |
| · Evaporation rate                    | Not determined.                            |       |
| · Solubility in / Miscibility with    |  |       |
| Water:                                | Not miscible or difficult to mix.          |       |
| · Partition coefficient (n-octanol/we | ater): Not determined.                     |       |
| · Viscosity:                          |  |       |
| Dynamic at 20 °C (68 °F):             | 32 mPas                                    |       |
| Kinematic:                            | Not determined.                            |       |
| · Solvent content:                    |  |       |
| Organic solvents:                     | 100.0 %                                    |       |
| VOC content:                          | 7.9 g/l / 0.07 lb/gl                       |       |
| Solids content:                       | 0.0 %                                      |       |
| • Other information                   | No further relevant information available. |       |

## **10 Stability and reactivity**

• *Reactivity* No further relevant information available.

- · 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

LD50 5,800 mg/kg (rat) Oral

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:

#### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

### **12 Ecological information**

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- $\cdot$  Mobility in soil No further relevant information available.
- $\cdot$  Additional ecological information:
- · General notes:
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

### **13 Disposal considerations**

- · Waste treatment methods
- · Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations.

- · Uncleaned packagings:
- · Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations

| · UN-Number<br>· DOT, IMDG, IATA   | UN1993                              |  |
|------------------------------------|-------------------------------------|--|
| · UN proper shipping name          |                                     |  |
| $\cdot DOT$                        | Flammable liquids, n.o.s. (Acetone) |  |
| · IMDG, IATA                       | FLAMMABLE LIQUID, N.O.S. (ACETONE)  |  |
| Transport hazard class(es)     DOT |                                     |  |
| · Class                            | 3 Flammable liquids                 |  |

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|--|--|
| · Label                                | 3  |
| · IMDG, IATA                           |  |
|  |  |
| · Class                                | 3 Flammable liquids                                |
| · Label                                | 3  |
| · Packing group                        |  |
| · DOT, IMDG, IATA                      | II   |
| · Environmental hazards:               | Not applicable.                                    |
| $\cdot$ Special precautions for user   | Warning: Flammable liquids                         |
| · Danger code (Kemler):                | 33   |
| · EMS Number:                          | <i>F-E</i> , <u><i>S-E</i></u>                     |
| · Stowage Category                     | В  |
| • Transport in bulk according to Annex |  |
| MARPOL73/78 and the IBC Code           | Not applicable.                                    |
| · Transport/Additional information:    |  |
| ·DOT                                   |  |
| • Quantity limitations                 | On passenger aircraft/rail: 5 L                    |
|  | On cargo aircraft only: 60 L                       |
| ·IMDG                                  |  |
| $\cdot$ Limited quantities (LQ)        | 1L   |
| $\cdot$ Excepted quantities (EQ)       | Code: E2   |
|  | Maximum net quantity per inner packaging: 30 ml    |
|  | Maximum net quantity per outer packaging: 500 ml   |
| · UN "Model Regulation":               | UN 1993 FLAMMABLE LIQUIDS, N.O.S. (ACETONE), 3, II |

## **15 Regulatory information**

 $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  Sara

• Section 355 (extremely hazardous substances): Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

· Proposition 65

· Chemicals known to cause cancer:

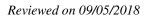
Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

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- $\cdot$  Chemicals known to cause reproductive toxicity for males:
- Substance is not listed.
- $\cdot$  Chemicals known to cause developmental toxicity:
- Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency)
- 67-64-1 acetone
- 142-82-5 heptane
- $\cdot$  TLV (Threshold Limit Value established by ACGIH)
- · NIOSH-Ca (National Institute for Occupational Safety and Health)
- Substance is not listed.
- *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). *Hazard pictograms*
- GHS02 GHS07
- · Signal word Danger

| • Hazard-determini<br>acetone  | ng components of labeling:   |
|--------------------------------|--|
|                                |  |
| heptane<br>• Hazard statements | -  |
|                                |  |
|                                | nable liquid and vapor.  |
| H319 Causes serio              |  |
| •                              | Irowsiness or dizziness.   |
| • Precautionary stat           |  |
| P210                           | Keep away from heat/sparks/open flames/hot surfaces No smoking.                                  |
| P240                           | Ground/bond container and receiving equipment.   |
| P241                           | Use explosion-proof electrical/ventilating/lighting/equipment.                                   |
| P242                           | Use only non-sparking tools.   |
| P243                           | Take precautionary measures against static discharge.  |
| 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 protective gloves/protective clothing/eye protection/face protection.                       |
| P303+P361+P353                 | 3 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/   |
|                                | shower.  |
| P304+P340                      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                       |
| P305+P351+P338                 | 8 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.  |
| P370+P378                      | In case of fire: Use for extinction: CO2, powder or water spray.                                 |
| P403+P233                      | Store in a well-ventilated place. Keep container tightly closed.                                 |
| P403+P235                      | Store in a well-ventilated place. Keep cool.   |
| P405                           | Store locked up.   |
|                                | (Contd. on page 10)  |

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P501

(Contd. of page 9) 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: Mr. Collins
- · Date of preparation / last revision 09/07/2018 / -
- Abbreviations and acronyms: 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. Liq. 2: Flammable liquids – Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A STOT SE 3: Specific target organ toxicity (single exposure) – Category 3