

Issuing date: 03/04/2015

Revision date: 01/11/2017

Revision number: 01

1. Identification of the substance/preparation and the company/undertaking

GHS product identifier

Product name: Acetaminophen Oral Solution USP

Other means of identification

Product code(s): **0121-0657-05, 0121-0657-11, 0121-0657-21, 0121-0657-00, 0121-1314-11,
0121-1314-00, 0121-1971-21, 0121-1971-00**

UN-Number: NA

Synonyms: Compare to Tylenol®

Recommended use of the chemical and restrictions on use

Recommended use: Pharmaceutical product used for pain relief and to reduce fever.

Uses advised against: Do not use except as recommended.

Supplier address/information

Pharmaceutical Associates, Inc.
201 Delaware Street
Greenville, SC 29605 (864) 277 -7282

Emergency telephone number: CHEMTREC 800.424.9300

2. Hazards Identification

Classification

This product is a mixture and is a pharmaceutical product. It is considered non-Hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Chemical family: Mixture

Statement of Hazard: Product is safe used as recommended.

Additional Hazard Information:

Short term:

Acetaminophen has been associated with cases of acute liver failure resulting in liver transplant and death. Most of the cases of liver injury are associated with the use of acetaminophen at doses that exceed 4000 milligrams per day, and often involve more than one acetaminophen containing product.

Long term:

No data available.

Known Clinical Effects: Overdosage may lead to liver damage.

EU Indication of danger: Not classified.

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Emergency overview

Seek medical attention in case of accidental exposure or overdose. The product is generally safe when used as prescribed.

Note: This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the active substance or its intermediates regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential of exposure in your workplace.

Precautionary statements

General advice: Seek medical attention in case of accidental exposure or overdose.

Eyes: Avoid contact with eyes.

Skin Contact: Avoid skin contact.

Inhalation: Not intended for inhalation.

Ingestion: Generally safe at recommended doses. In case of overdose, seek medical attention immediately.

Storage: There are no special storage conditions for safety. For product integrity, store under conditions specified on the label.

Disposal: Dispose of in accordance with applicable laws and regulations.

3. Composition/Information on ingredients

| Chemical name | CAS-No | mg/5 mL | Trade Secret |
|-------------------------|------------|-------------|--------------|
| Acetaminophen | 103-90-2 | 160 mg/5 mL | |
| Glycerin | 56-81-5 | | X |
| Polyethylene Glycol 400 | 25322-68-3 | | X |
| Propylene Glycol | 57-55-6 | | X |
| Sorbitol Solution | Mixture | | X |
| Sodium Benzoate | 532-32-1 | | X |
| Citric Acid Anhydrous | 77-92-9 | | X |
| Sodium Citrate | 6132-04-3 | | X |
| Sucrose | 57-50-1 | | X |
| FD&C Red No. 40 | 25956-17-6 | | X |
| Fruit Flavors | Mixture | | X |

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4. First aid measures

Description of necessary first-aid measures

Eye contact:

Flush with running water for 15 minutes holding eyelids open. Contact medical personnel if irritation persists.

Skin contact:

Wash contaminated area thoroughly. If irritation persists, contact medical personnel.

Inhalation:

Remove to fresh air and contact medical personnel.

Ingestion:

Overdosage or accidental ingestion – Toxicity may result from acetaminophen overdosage. Contact medical personnel or poison control immediately if overdosage is suspected.

Most important symptoms/effects, acute and delayed

Overdosage may cause liver damage.

Indication of immediate medical attention and special treatment needed, if necessary

Immediate medical attention is required if overdose is suspected.

Notes to Physician: NA

5. Fire-fighting measures

Suitable extinguishing media:

Use carbon dioxide, dry chemical or water spray.

Specific hazards arising from the chemical

None

Explosion data:

Not applicable

Protective equipment and precautions for firefighters'

During all firefighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (See Section 8). Minimize exposure.

Environmental precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and materials for containment and cleaning up

- Methods for containment:
- Methods for cleaning up:

Isolate area around spill as specified by site procedures. Absorb the liquid with suitable material. Dispose of spill material in accordance with applicable federal, state or local regulations.

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7. Handling and storage

Precautions for safe handling

Handling: No special handling required for hazard control under conditions of normal product use.

Conditions for safe storage, including any incompatibilities

Storage: No special storage required for hazard control. For product protection, follow storage recommendations on the case label, primary product label and insert.

Incompatible products: As a precautionary measure, keep away from strong oxidizers.

8. Exposure controls/personal protection

Control parameters

Exposure guidelines: The exposure guidelines listed below are for the individual components and not the product itself.

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------------|---------------------------------|---------------------------------|--------------------------|
| Acetaminophen | Not Available | Not Available | Not Available |
| Glycerin | 10 mg.m ³ TWA | 10 mg.m ³ TWA | Not Available |
| Polyethylene Glycol 400 | 10 mg/m ³ TWA (WEEL) | Not Available | Not Available |
| Propylene Glycol | Not Available | 10 mg.m ³ TWA (WEEL) | Not Available |
| Sorbitol Solution | Not Available | Not Available | Not Available |
| Sodium Benzoate | Not Available | Not Available | Not Available |
| Citric Acid Anhydrous | 10 mg/m ³ TWA | 15 mg/m ³ TWA | Not Available |
| Sodium Citrate | Not Available | Not Available | Not Available |
| Sucrose | 10 mg/m ³ | 15 mg/m ³ | 10 mg/m ³ TWA |
| FD&C Red No. 40 | Not Available | Not Available | Not Available |
| Fruit Flavors | Not Available | Not Available | Not Available |

Appropriate engineering controls

Engineering measures: Engineering controls should be used to limit exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection: Not required under normal conditions of use. Wear safety glasses or goggles if eye contact is possible.

Skin and body protection: Not required under normal conditions of use. Wear protective clothing when working with large quantities.

Respiratory protection: Not required under normal use of the product. If the applicable PEL (Permissible Exposure Limit) is exceeded use an appropriate respirator.

Hygiene measures: Wash hands thoroughly after use.

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9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Solution
 Odor: Fruity
 Appearance: Clear red solution
 Odor threshold: Not available

| Property | Values | Remarks/Method |
|--|----------------|----------------|
| pH | 3.8 – 6.1 | Current USP |
| Melting point/range | Not applicable | |
| Boiling point/boiling range | Not available | |
| Flash point | Not applicable | |
| Evaporation rate | Not applicable | |
| Flammability (solid, gas) | Not applicable | |
| Flammability limits in air | Not applicable | |
| -upper flammability limit | Not applicable | |
| -lower flammability limit | Not applicable | |
| Vapor pressure | Not applicable | |
| Vapor density | Not applicable | |
| Specific gravity | 1.2 | Current USP |
| Water solubility | Not applicable | |
| Solubility in other solvents | Not applicable | |
| Partition coefficient: n-octanol/water | Not applicable | |
| Autoignition temperature | Not applicable | |
| Decomposition temperature | Not applicable | |
| Viscosity | Not available | |
| Flammable properties | Not applicable | |
| Explosive properties | Not applicable | |
| Oxidizing properties | Not applicable | |

Other information VOC content (%)

NA

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10. Stability and reactivity

| | |
|------------------------------------|--|
| Reactivity | Stable at normal conditions |
| Chemical stability | Stable at normal conditions |
| Possibility of hazardous reactions | Stable at normal conditions |
| Conditions to avoid | None known |
| Incompatible materials | As a precautionary measure, keep away from strong oxidizers. |
| Hazardous decomposition products | None known |

11. Toxicological information

Information on likely routes of exposure

Product information:

- Inhalation: Not Available
- Eye contact: Not Available
- Skin contact: Not Available
- Ingestion: Not Available

The information in the table below is for the individual components and not the product.

| Chemical name | LD50 oral | LD50 dermal | LC50 inhalation |
|-------------------------|-----------------|---------------------|-----------------|
| Acetaminophen | 1944 mg/kg Rat | Not Available | Not Available |
| Glycerin | 12600 mg/kg Rat | 10000 mg/kg Rabbit | Not Available |
| Polyethylene Glycol 400 | 30200 mg/kg Rat | 20000 mg/kg Rabbit | 13 ppm 8 hr Rat |
| Propylene Glycol | 20000 mg/kg Rat | 20800 mg/kg Rabbit | Not Available |
| Sorbitol Solution | Not Available | Not Available | Not Available |
| Sodium Benzoate | 2100 mg/kg Rat | Not Available | Not Available |
| Citric Acid | 5400 mg/kg Rat | >2000 mg/kg Rat | Not Available |
| Sodium Citrate | Not Available | Not Available | Not Available |
| Sucrose | 29700 mg/kg Rat | Not Available | Not Available |
| FD&C Red No.40 | >10000mg/kg Rat | >10000 mg/kg Rabbit | Not Available |
| Fruit Flavors | Not Available | Not Available | Not Available |

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Symptoms related to the physical, chemical and toxicological characteristic:

No data available

Delayed and immediate effects and also chronic effects from short and long term exposure

- Sensitization: No data available
- Mutagenic effects: No data available
- Carcinogenicity: Not carcinogenic
- Reproductive toxicity: No data available
- STOT – single exposure: No data available
- STOT – repeated exposure: No data available
- Aspiration hazard: No data available

- **Numerical measures of toxicity – product** No data available

12. Ecological information

Ecotoxicity:

Environmental properties have not been thoroughly evaluated. Releases to the environment should be avoided.

Persistence and Degradability:

No data available

Bioaccumulation:

No data available

Other adverse effects:

No data available

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The following table lists the data for the individual components, if available.

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to micro-organisms | Daphnia Magna (water flea) |
|-------------------------|-------------------|---|-----------------------------|----------------------------|
| Acetaminophen | Not Available | 814 mg/L 96 hr. Pimephales promelas | Not Available | 9.2 mg/L 48 hr. |
| Glycerin | Not Available | 58.5 ppm 96 hr Trout | Not Available | Not Available |
| Polyethylene Glycol 400 | Not Available | >5000 mg/L 96 hr Pimephales Promelas | Not Available | Not Available |
| Propylene Glycol | Not Available | 52930 mg/L 96 hr. Pimephales promelas | Not Available | 13020 mg/L 48 hr. |
| Sorbitol Solution | Not Available | Not Available | Not Available | Not Available |
| Sodium Benzoate | Not Available | 484 mg/L 96 hr. Pimephales Promelas | Not Available | Not Available |
| Citric Acid | Not Available | 440 mg/L 48 hr Leuciscus idus melanotus | Not Available | 1535 mg/L 24 hr. |
| Sodium Citrate | Not Available | Not Available | Not Available | Not Available |
| Sucrose | Not Available | Not Available | Not Available | Not Available |
| Fruit Flavors | Not Available | Not Available | Not Available | Not Available |
| FD&C Red No. 40 | Not Available | Not Available | Not Available | Not Available |

13. Disposal considerations

Waste disposal methods

Dispose of waste in accordance with all federal, state and local regulations.

Contaminated packaging

Dispose of waste in accordance with all federal, state and local regulations.

14. Transport information

Notes:

Not regulated for transport under USDOT, IATA, TDG, IMDG or other regulations.

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15. Regulatory information

International inventories

TSCA:

United States Toxic Substances Control Act 8(b) inventory not applicable for product. The following components are included on the inventory: Acetaminophen, Glycerin, Polyethylene Glycol, Propylene Glycol, Sodium Benzoate, Citric Acid, Sucrose and FD&C Red No. 40.

EINECS:

Acetaminophen, FD&C Red no. 40, Glycerin, Polyethylene Glycol, Propylene Glycol, Sodium Benzoate, Citric Acid, Sodium Citrate and Sucrose are listed on the EINECS inventory.

U.S. Federal regulations

OSHA Label:

Not applicable

SARA 311/312 Hazard categories:

Not Applicable

Clean Water Act:

This product **does not** contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA:

No components are listed under CERCLA.

California Proposition 65:

This product does not contain any chemical which is listed as under Proposition 65.

U.S. state Right-to-Know regulations

"X" designates that the ingredients are listed on the state Right-to-Know list

| Chemical name | New Jersey | Massachusetts | Pennsylvania | Illinois | Rhode Island |
|---------------------|------------|---------------|--------------|----------|--------------|
| Acetaminophen | X | | X | | |
| Glycerin | X | X | X | X | X |
| Polyethylene Glycol | X | | X | | |
| Propylene Glycol | X | | X | | |
| Sorbitol Solution | X | | X | | |
| Sodium Benzoate | X | | X | | |
| Citric Acid | X | | X | | |
| Sodium Citrate | X | | X | | |
| Sucrose | X | X | X | | |
| Fruit Flavors | | | | | |
| FD&C Red No. 40 | | | | | |

U.S. EPA label information:

Not applicable

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16. Other information

Prepared by: Pharmaceutical Associates Regulatory Affairs Department
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Revision note:

- Updated Section 1 to add NDC Numbers 0121-0657-00, 0121-1314-11, 0121-1314-00, 0121-1971-21, and 0121-1971-00
- Removed "May burn emitting oxides of chlorine and nitrogen" from section 5 and replaced it with "none."
- Updated formatting, grammar and punctuation throughout the document.

General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet