

1. Identification

Product identifier RAP 350FR®

Other means of identification Not available.

Recommended use Not available.

Recommended restrictions Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name CETCO

Address 2870 Forbs Avenue
Hoffman Estates, IL 60192
United States

Telephone General Information 800 527-9948

Website <http://www.cetco.com/>

E-mail safety.data@amcol.com

Emergency phone number .

Americas 1.866.519.4752 (US, Canada, Mexico) 1 760 476 3962

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Prevention Observe good industrial hygiene practices.

Response If exposed or concerned: Get medical advice/attention.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|---|------------|-----------|
| ASPHALT | PETROLEUM ASPHALT | 8052-42-4 | 30 - < 40 |
| CALCIUM BORATE | | 12007-56-6 | 10 - < 20 |
| CALCIUM CARBONATE | LIMESTONE | 1317-65-3 | 10 - < 20 |
| QUARTZ | CRYSTALLINE SILICA, QUARTZ SILICA (QUARTZ) | 14808-60-7 | 3 - < 5 |
| Other components below reportable levels | | | 30 - < 40 |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

Skin contact Wash off with warm water and soap. Get medical attention if irritation develops or persists.

| | |
|---|--|
| Eye contact | Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention if irritation develops or persists. |
| Ingestion | If swallowed, rinse mouth with water (only if the person is conscious). Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Consult a physician if necessary. Give several glasses of water. |
| Most important symptoms/effects, acute and delayed | Direct contact with eyes may cause temporary irritation. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. |
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

5. Fire-fighting measures

| | |
|--|---|
| Suitable extinguishing media | Foam. Dry powder. Dry chemical, CO ₂ , water spray or regular foam. Carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | Water. Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Firefighters should wear full protective clothing including self contained breathing apparatus. |
| Fire-fighting equipment/instructions | Move containers from fire area if you can do so without risk. |
| Specific methods | Move containers from fire area if you can do so without risk. |
| General fire hazards | No unusual fire or explosion hazards noted. |

6. Accidental release measures

| | |
|--|---|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation. For waste disposal, see section 13 of the SDS. Reduce airborne dust and prevent scattering by moistening with water. Containment of this material should not be necessary. |
| Environmental precautions | No special environmental precautions required. |

7. Handling and storage

| | |
|---|--|
| Precautions for safe handling | Do not handle or store near an open flame, heat or other sources of ignition. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Heat only in areas with appropriate exhaust ventilation. Do not breathe dust. Avoid prolonged exposure. |
| Conditions for safe storage, including any incompatibilities | Keep in a dry, cool place. Keep away from heat, sparks, and flame. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). |

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value | Form |
|--|-------------|--------------------------|----------------------|
| CALCIUM CARBONATE (CAS 1317-65-3) | PEL | 5 mg/m ³ | Respirable fraction. |
| Additional components | Type | Value | Form |
| INERT OR NUISANCE DUSTS (CAS SEQ250) | PEL | 5 mg/m ³ | Respirable fraction. |
| | | 15 mg/m ³ | Total dust. |
| US. OSHA Table Z-3 (29 CFR 1910.1000) | | | |
| Components | Type | Value | Form |
| QUARTZ (CAS 14808-60-7) | TWA | 0.3 mg/m ³ | Total dust. |
| | | 0.1 mg/m ³ | Respirable. |
| | | 2.4 millions of particle | Respirable. |

US. OSHA Table Z-3 (29 CFR 1910.1000)

| Additional components | Type | Value | Form |
|--------------------------------------|-------------|-------------------------|----------------------|
| INERT OR NUISANCE DUSTS (CAS SEQ250) | TWA | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| | | 50 millions of particle | Total dust. |
| | | 15 millions of particle | Respirable fraction. |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|-------------------------|-------------|--------------|----------------------|
| ASPHALT (CAS 8052-42-4) | TWA | 0.5 mg/m3 | Inhalable fraction. |
| QUARTZ (CAS 14808-60-7) | TWA | 0.025 mg/m3 | Respirable fraction. |

| Additional components | Type | Value | Form |
|--------------------------------------|-------------|--------------|-----------------------|
| INERT OR NUISANCE DUSTS (CAS SEQ250) | TWA | 3 mg/m3 | Respirable particles. |
| | | 10 mg/m3 | Inhalable particles. |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value | Form |
|-----------------------------------|-------------|--------------|------------------|
| ASPHALT (CAS 8052-42-4) | Ceiling | 5 mg/m3 | Fume. |
| CALCIUM CARBONATE (CAS 1317-65-3) | TWA | 5 mg/m3 | Respirable. |
| | | 10 mg/m3 | Total |
| QUARTZ (CAS 14808-60-7) | TWA | 0.05 mg/m3 | Respirable dust. |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Hand protection

Wear protective gloves.

Other

Wear appropriate chemical resistant clothing. Use appropriate hand protection. The use of leather gloves is recommended.

Respiratory protection

Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit. When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke.

9. Physical and chemical properties

| | |
|--|-------------------------------|
| Appearance | Fabric/Mat |
| Physical state | Solid. |
| Form | Solid. Roll. |
| Color | Black. |
| Odor | Petroleum |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | 700 °F (371.11 °C) estimated |
| Flash point | 283.7 °F (139.8 °C) estimated |

| | |
|---|----------------------------|
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | 905 °F (485 °C) estimated |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Density | 1.00 g/cm3 estimated |
| Flammability class | Combustible IIIB estimated |
| Percent volatile | 0 % estimated |
| Specific gravity | 1 estimated |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | This is a stable material. |
| Possibility of hazardous reactions | Will not occur. |
| Conditions to avoid | Heat, flames and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials | Acids. Fluorine. |
| Hazardous decomposition products | Irritating and/or toxic fumes and gases may be emitted upon the products decomposition. |

11. Toxicological information

Information on likely routes of exposure

| | |
|---------------------|--|
| Ingestion | Expected to be a low ingestion hazard. |
| Inhalation | Prolonged inhalation may be harmful. |
| Skin contact | Not available. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

| Product | Species | Test Results |
|--------------------------|---------|--------------|
| RAP 350FR® (CAS Mixture) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rat | 8222 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 5248 mg/kg |

| Components | Species | Test Results |
|---------------------------------|---------|--------------|
| CALCIUM BORATE (CAS 12007-56-6) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Rat | 5600 mg/kg |
| QUARTZ (CAS 14808-60-7) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Rat | 500 mg/kg |

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Risk of cancer cannot be excluded with prolonged exposure. This material contains petroleum asphalt. IARC has determined that there is inadequate evidence that undiluted, air-refined asphalt is carcinogenic to animals. There is only limited evidence that undiluted, steam-refined and cracking-residue asphalt are carcinogenic to animals. Additionally, IARC has concluded that there is inadequate evidence that asphalts alone are carcinogenic to humans.

Prolonged and repeated skin contact with some solvent extracts of asphalts have produced skin cancer in animals. IARC has concluded that there is sufficient evidence for the carcinogenicity of asphalt extracts in animals. Therefore, "cutbacks" (asphalts that are diluted, dissolved, or liquefied in hydrocarbon solvents) may also be implicated as potentially carcinogenic. While brief or intermittent skin contact with this type of product is not expected to cause harm, those workers who do not practice good personal hygiene and who are exposed repeatedly via skin contact may be at risk.

Condensed asphalt fumes, which are generated under laboratory conditions and are chemically different from those found during typical asphalt operations, have been reported to cause bacterial mutations. However, inhalation of asphalt fumes by laboratory animals, during controlled studies, did not produce lung cancer. Additionally, human studies have not established a link between lung cancer and asphalt fume exposure to date.

This product may contain trace amounts of polynuclear aromatic hydrocarbons (PAHs) as naturally occurring constituents of crude oils from which asphalt is derived. Some PAHs have been shown to be carcinogenic after prolonged or repeated skin contact in laboratory animals.

IARC Monographs. Overall Evaluation of Carcinogenicity

| | |
|-------------------------|---|
| ASPHALT (CAS 8052-42-4) | 2B Possibly carcinogenic to humans. |
| | 3 Not classifiable as to carcinogenicity to humans. |
| QUARTZ (CAS 14808-60-7) | 1 Carcinogenic to humans. |

US. National Toxicology Program (NTP) Report on Carcinogens

| | |
|-------------------------|-------------------------------|
| QUARTZ (CAS 14808-60-7) | Known To Be Human Carcinogen. |
|-------------------------|-------------------------------|

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

| | |
|---|---|
| Specific target organ toxicity - repeated exposure | Not classified. |
| Aspiration hazard | Not available. |
| Chronic effects | Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Some of the components of this product are hazardous in the respirable form. However, because of the physical nature of this product, dust generation is not expected. Overexposure to dusts may result in pneumoconiosis, which can lead to fibrotic changes in the lung tissue, or silicosis, a respiratory disease caused by inhalation of crystalline silica dust, which can lead to inflammation and fibrosis of the lung tissue. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. |
| Further information | Information given is based on data on the components and the toxicology of similar products. No data is available on the product itself. |

12. Ecological information

| | |
|--------------------------------------|---|
| Ecotoxicity | This product has no known eco-toxicological effects. |
| Persistence and degradability | No data is available on the degradability of this product. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |
| Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

13. Disposal considerations

| | |
|--|--|
| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. |
| Local disposal regulations | Dispose in accordance with all applicable regulations. |
| Hazardous waste code | The waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

| | |
|-------------|-----------------------------------|
| DOT | Not regulated as dangerous goods. |
| IATA | Not regulated as dangerous goods. |
| IMDG | Not regulated as dangerous goods. |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

15. Regulatory information

| | |
|-------------------------------|--|
| US federal regulations | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119. All components are on the U.S. EPA TSCA Inventory List. CERCLA/SARA Hazardous Substances - Not applicable. |
|-------------------------------|--|

CERCLA Hazardous Substance List (40 CFR 302.4)

ASPHALT (CAS 8052-42-4) LISTED

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

| | |
|--------------------------|---|
| Hazard categories | Immediate Hazard - No Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No |
|--------------------------|---|

SARA 302 Extremely hazardous substance Yes
SARA 311/312 Hazardous chemical Yes
SARA 313 (TRI reporting)
 Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
 Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
 Not regulated.
Safe Drinking Water Act (SDWA) Not regulated.

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

CALCIUM CARBONATE (CAS 1317-65-3)
 QUARTZ (CAS 14808-60-7)

US. Massachusetts RTK - Substance List

ASPHALT (CAS 8052-42-4)
 CALCIUM CARBONATE (CAS 1317-65-3)
 QUARTZ (CAS 14808-60-7)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4) Listed: January 1, 1990
 QUARTZ (CAS 14808-60-7) Listed: October 1, 1988

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | Yes |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 13-August-2014
Revision date 13-August-2014
Version # 10
Further information This safety datasheet only contains information relating to safety and does not replace any product information or product specification.
HMIS® ratings Health: 2*
 Flammability: 1
 Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 1
Instability: 0

Disclaimer

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and experience currently available.

Revision Information

GHS: Classification