## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| | | |
|---|---|---|
| Product name | : | Acetone - All Grades |
| Number | : | 000000015713 |
| Product Use Description | : | Chemical intermediate |
| Manufacturer or supplier's details | : | AdvanSix Inc.<br>115 Tabor Road<br>Morris Plains, NJ 07950-2546 |
| For more information call | : | 1-844-890-8949<br>+1-973-455-3000 |
| **In case of emergency call** | : | **Medical: 1-800-498-5701 or +1-303-389-1414** |
| | : | **Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887** |
| | : | |
| | : | (24 hours/day, 7 days/week) |

## SECTION 2. HAZARDS IDENTIFICATION

### Emergency Overview

| | | |
|---|---|---|
| Form | : | liquid |
| Color | : | colourless |
| Odor | : | sweet pungent |

### Classification of the substance or mixture

| | | |
|---|---|---|
| Classification of the substance or mixture | : | Flammable liquids, Category 2<br>Eye irritation, Category 2B<br>Specific target organ toxicity - single exposure, Category 3, Respiratory system, Central nervous system |

### GHS Label elements, including precautionary statements

Symbol(s) :



Signal word : Danger

Hazard statements : Highly flammable liquid and vapour.
Causes eye irritation.
May cause respiratory irritation.
May cause drowsiness and dizziness.

Precautionary statements : **Prevention:**
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ eye protection/ face protection.

**Response:**
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTER/doctor if you feel unwell.
If eye irritation persists: Get medical advice/ attention.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:**
Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.

**Disposal:**
Dispose of contents/ container to an approved waste disposal plant.

**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C3H6O

Chemical nature : Substance

| Chemical name | CAS-No. | Concentration |
|---|---|---|
| Acetone | 67-64-1 | <=100.00 % |

## SECTION 4. FIRST AID MEASURES

General advice : First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician.

Skin contact : Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician.

Ingestion : Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Call a physician.

**Notes to physician**

Treatment : Treat symptomatically. Risk of product entering the lungs on vomiting after ingestion.

## SECTION 5. FIREFIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Cool closed containers exposed to fire with water spray.<br>Alcohol-resistant foam<br>Dry chemical<br>Carbon dioxide (CO2) |
| Specific hazards during firefighting | : | Extremely flammable.<br>Forms or accumulates static electricity, may cause fire or explosion.<br>Vapours may form explosive mixtures with air.<br>Vapours are heavier than air and may spread along floors.<br>Vapors may travel to areas away from work site before igniting/flashing back to vapor source.<br>In case of fire hazardous decomposition products may be produced such as:<br>Carbon monoxide<br>Carbon dioxide (CO2) |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus and protective suit. |
| Further information | : | Acetone/water solutions that contain more than 2.5% acetone have flash points. When the acetone concentration is greater than 8% (by weight) in a closed container, it would be within the flammable range and cause fire or explosion if a source of ignition were introduced. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions | : | Wear personal protective equipment. Unprotected persons must be kept away.<br>Immediately evacuate personnel to safe areas.<br>Keep people away from and upwind of spill/leak.<br>Ensure adequate ventilation.<br>Remove all sources of ignition.<br>Do not swallow.<br>Do not breathe vapours or spray mist.<br>Avoid contact with skin, eyes and clothing. |
| Environmental precautions | : | Prevent further leakage or spillage if safe to do so.<br>Prevent product from entering drains.<br>Discharge into the environment must be avoided.<br>Do not flush into surface water or sanitary sewer system.<br>Do not allow run-off from fire fighting to enter drains or water |

courses.

Methods for cleaning up : Ventilate the area.
No sparking tools should be used.
Use explosion-proof equipment.
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

## SECTION 7. HANDLING AND STORAGE

### Handling

Handling : Wear personal protective equipment.
Use only in well-ventilated areas.
Keep container tightly closed.
Do not use air pressure to unload containers.
Do not smoke.
Do not swallow.
Do not breathe vapours or spray mist.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion : Keep away from fire, sparks and heated surfaces.
This liquid may form an ignitable vapor-air mixture in closed tanks or containers. This liquid may accumulate static electricity even when transferred into properly grounded containers. Bonding and grounding may be insufficient to remove static electricity.
Static electricity accumulation may be significantly increased by the presence of small quantities of water. Always bond the receiving container to the fill pipe before and during loading, following NFPA-77 and/or API RP 2003 requirements.
Automatic gauging devices and other floats in vessels or tanks which contain static accumulating liquids should be electrically bonded to the shell. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards associated with electrostatic charges.
In addition to bonding and grounding, efforts to mitigate the hazards of an electrostatic discharge may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities.
Always keep the nozzle in contact with the container throughout the loading process. Do not fill any portable containers in or on a vehicle.
Special precautions, such as reduced loading rates and increased monitoring, must be observed during "switch loading" operations (i.e. loading this material in tanks or shipping

compartments that previously contained middle distillates or similar products).
Non-equilibrium conditions may increase the risks associated with static electricity such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc.
Dissipation of electrostatic charges may be improved with the use of conductivity additives when used with other mitigating efforts, including bonding and grounding.
Use explosion-proof equipment.
Keep product and empty container away from heat and sources of ignition.
Use only non-sparking tools.
No smoking.

**Storage**

| | | |
|---|---|---|
| Requirements for storage areas and containers | : | Store in area designed for storage of flammable liquids. Protect from physical damage.<br>Keep containers tightly closed in a dry, cool and well-ventilated place.<br>Containers which are opened must be carefully resealed and kept upright to prevent leakage.<br>Keep away from heat and sources of ignition.<br>Keep away from direct sunlight.<br>Store away from incompatible substances.<br>Container hazardous when empty.<br>Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| Further information on storage conditions | : | Store in original container.<br>Keep containers tightly closed in a dry, cool and well-ventilated place.<br>Recommended storage temperature: 10 - 25 °C. |

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | |
|---|---|---|
| Protective measures | : | Ensure that eyewash stations and safety showers are close to the workstation location. |
| Engineering measures | : | Use only in an area equipped with explosion proof exhaust ventilation.<br>Prevent vapour buildup by providing adequate ventilation during and after use.<br>Electrical equipment should be protected to the appropriate |

standard.

Eye protection : Do not wear contact lenses.
Wear as appropriate:
Safety glasses with side-shields
If splashes are likely to occur, wear:
Goggles or face shield, giving complete protection to eyes

Hand protection : Solvent-resistant gloves
Gloves must be inspected prior to use.
Replace when worn.

Skin and body protection : Wear as appropriate:
Solvent-resistant apron and boots
Flame retardant antistatic protective clothing.
If splashes are likely to occur, wear:
Protective suit

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
For rescue and maintenance work in storage tanks use self-contained breathing apparatus.
Use NIOSH approved respiratory protection.

Hygiene measures : When using, do not eat, drink or smoke.
Wash hands and face before breaks and immediately after handling the product.
Keep working clothes separately.
Remove and wash contaminated clothing before re-use.
Do not swallow.
Do not breathe vapours or spray mist.
Avoid contact with skin, eyes and clothing.

**Exposure Guidelines**

| Components | CAS-No. | Value | Control parameters | Update | Basis |
|---|---|---|---|---|---|
| Acetone | 67-64-1 | TWA : Time weighted average | (250 ppm) | 03 2015 | ACGIH:US. ACGIH Threshold Limit Values |
| Acetone | 67-64-1 | STEL : Short term exposure limit | (500 ppm) | 03 2015 | ACGIH:US. ACGIH Threshold Limit Values |

| | | | | | |
|---|---|---|---|---|---|
| Acetone | 67-64-1 | REL : Recommended exposure limit (REL): | 590 mg/m3 (250 ppm) | 2005 | NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards |
| Acetone | 67-64-1 | PEL : Permissible exposure limit | 2,400 mg/m3 (1,000 ppm) | 02 2006 | OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) |
| Acetone | 67-64-1 | TWA : Time weighted average | 1,800 mg/m3 (750 ppm) | 1989 | Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000) |
| Acetone | 67-64-1 | STEL : Short term exposure limit | 2,400 mg/m3 (1,000 ppm) | 1989 | Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000) |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Physical state | : | liquid |
| Color | : | colourless |
| Odor | : | sweet pungent |
| pH | : | 7 |
| Melting point/range | : | -94 °C |
| Boiling point/boiling range | : | 56.1 °C |
| Flash point | : | 1 °F (-17 °C) |
| Lower explosion limit | : | 2.5 %(V) |

| | | |
|---|---|---|
| Upper explosion limit | : | 12.8 %(V) |
| Vapor pressure | : | 241 hPa<br>at 20 °C(68 °F) |
| Density | : | 0.79 g/cm3 |
| Water solubility | : | Note: completely soluble |
| Ignition temperature | : | 465 °C |
| Molecular weight | : | 58.08 g/mol |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | Hazardous polymerisation does not occur. |
| Conditions to avoid | : | Heat, flames and sparks.<br>Keep away from direct sunlight. |
| Incompatible materials to avoid | : | Acids<br>Aldehydes<br>Alkalis<br>Amines<br>Ammonia<br>Oxidizing agents<br>Reducing agents<br>Chlorine compounds<br>May form explosive mixtures with chromic anhydride, chromyl alcohol, hexachloromelamine, hydrogen peroxide, permonosulfuric acid, potassium tertbutoxide, and thioglycol. |
| Hazardous decomposition products | : | In case of fire hazardous decomposition products may be produced such as:<br>Carbon monoxide |

Carbon dioxide ($CO_2$)

## SECTION 11. TOXICOLOGICAL INFORMATION

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50: 5,800 mg/kg<br>Species: Rat |
| Acute inhalation toxicity | : | LC50: 32000 ppm<br>Exposure time: 4 h<br>Species: Rat |
| Acute dermal toxicity | : | LD50: > 7,426 mg/kg<br>Species: Guinea pig |
| Skin irritation | : | Species: Rabbit<br>Result: Mild skin irritation<br>Exposure time: 24 h |
| Eye irritation | : | Species: Rabbit<br>Result: irritating<br>Method: Draize Test |
| Repeated dose toxicity | : | Species: Rat<br>NOEL: 19000 ppm<br>Note: 8-Week Inhalation Toxicity Study 5 days/week for 8 weeks Slightly reduced weight gain compared to controls |
| | : | Species: Rat<br>NOEL: 100 mg/kg<br>Note: 90-Day Oral Toxicity Study increased liver and kidney weights |
| | : | Species: Rat<br>Lowest observed effect level: 500 mg/kg<br>Note: 90-Day Oral Toxicity Study increased liver and kidney weights |

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

| | | |
|---|---|---|
| Toxicity to fish | : | static test<br>LC50: 5,540 mg/l<br>Exposure time: 96 h<br>Species: Oncorhynchus mykiss (rainbow trout) |
| | : | static test<br>LC50: 8,300 mg/l<br>Exposure time: 96 h<br>Species: Lepomis macrochirus (Bluegill sunfish) |
| Toxicity to daphnia and other aquatic invertebrates | : | LC50: 12,600 - 12,700 mg/l<br>Exposure time: 48 h<br>Species: Daphnia magna (Water flea) |
| Toxicity to algae | : | EC50: 3,020 mg/l<br>Exposure time: 14 d<br>Species: Chlorella pyrenoidosa (aglae) |
| Toxicity to bacteria | : | EC50: 14,500 mg/l<br>Exposure time: 15 min<br>Species: Photobacterium phosphoreum |

### Elimination information (persistence and degradability)

| | | |
|---|---|---|
| Biodegradability | : | anaerobic<br>Result: Readily biodegradable<br>Value: 78 %<br>Method: OECD 301 D |

### Further information on ecology

## SECTION 13. DISPOSAL CONSIDERATIONS

| | | |
|---|---|---|
| Disposal methods | : | Observe all Federal, State, and Local Environmental regulations. |

## SECTION 14. TRANSPORT INFORMATION

| | | | |
|---|---|---|---|
| **DOT** | UN/ID No. | : | UN 1090 |
| | Proper shipping name | : | ACETONE |
| | Class | | 3 |
| | Packing group | | II |
| | Hazard Labels | | 3 |
| **IATA** | UN/ID No. | : | UN 1090 |
| | Description of the goods | : | ACETONE |
| | Class | : | 3 |
| | Packaging group | : | II |
| | Hazard Labels | : | 3 |
| | Packing instruction (cargo aircraft) | : | 364 |
| | Packing instruction (passenger aircraft) | : | 353 |
| | Packing instruction (passenger aircraft) | : | Y341 |
| **IMDG** | UN/ID No. | : | UN 1090 |
| | Description of the goods | : | ACETONE |
| | Class | : | 3 |
| | Packaging group | : | II |
| | Hazard Labels | : | 3 |
| | EmS Number | : | F-E, S-D |
| | Marine pollutant | : | no |

## SECTION 15. REGULATORY INFORMATION

**Inventories**

| | | |
|---|---|---|
| US. Toxic Substances Control Act | : | On TSCA Inventory |
| Australia. Industrial Chemical (Notification and Assessment) Act | : | On the inventory, or in compliance with the inventory |
| Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) | : | All components of this product are on the Canadian DSL |
| Japan. Kashin-Hou Law List | : | On the inventory, or in compliance with the inventory |

| | | |
|---|---|---|
| Korea. Toxic Chemical Control Law (TCCL) List | : | On the inventory, or in compliance with the inventory |
| Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act | : | On the inventory, or in compliance with the inventory |
| China. Inventory of Existing Chemical Substances | : | On the inventory, or in compliance with the inventory |
| New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand | : | On the inventory, or in compliance with the inventory |

**National regulatory information**

| | | |
|---|---|---|
| **SARA 302 Components** | : | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. |
| **SARA 313 Components** | : | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. |
| **SARA 311/312 Hazards** | : | Fire Hazard<br>Acute Health Hazard<br>Chronic Health Hazard |
| **CERCLA Reportable Quantity** | : | 5000 lbs |
| **California Prop. 65** | : | WARNING! This product contains a chemical known to the State of California to cause cancer.<br>Acetaldehyde 75-07-0<br>Benzene 71-43-2<br>Cumene 98-82-8 |

: WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| | |
|---|---|
| Methanol | 67-56-1 |
| Benzene | 71-43-2 |
| Toluene | 108-88-3 |

| | | | |
|---|---|---|---|
| **Massachusetts RTK** | : | Acetone | 67-64-1 |
| | : | Acetaldehyde | 75-07-0 |
| **New Jersey RTK** | : | Acetone | 67-64-1 |
| **Pennsylvania RTK** | : | Acetone | 67-64-1 |

## SECTION 16. OTHER INFORMATION

| | | HMIS III | NFPA |
|---|---|---|---|
| Health hazard | : | 2* | 1 |
| Flammability | : | 3 | 3 |
| Physical Hazard | : | 0 | |
| Instability | : | | 0 |

* - Chronic health hazard
Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

**Further information**

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 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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

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