MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product identifier Acetone
Version # 02
Issue date 12-03-2014
Revision date 12-06-2014
Supersedes date 12-05-2014
Chemical name Acetone
Product use Solvent
Manufacturer information
Refer to supplier
Supplier
Comet Chemical 3463 Thomas Street Innisfill, ON L9S 3W4 CAInformation (M-F 8:00-5:00): 705-436-5580 24 Hour Number (Newalta): 800-567-7455

2. Hazards Identification

Emergency overview Clear, colorless liquid. Strong, sweet odour.
DANGER
EXTREMELY FLAMMABLE LIQUID AND VAPOR.
Flammable liquid - may release vapors that form flammable mixtures at or above the flash point. Will be easily ignited by heat, spark or flames. Vapors may cause a flash fire or ignite explosively. Causes skin and eye irritation. May be harmful if swallowed. May be an aspiration hazard.
Aspiration may occur during swallowing or vomiting, resulting in lung injury. May cause nausea, vomiting, headache and other central nervous system effects.
Potential health effects
Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.
Eyes Causes moderate to severe eye irritation.
Skin Causes moderate skin irritation.
Inhalation May cause irritation of respiratory tract. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects.
Ingestion May be harmful if swallowed. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. May be an aspiration hazard. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.
Target organs Central nervous system. Eyes. Respiratory system. Skin.
Chronic effects Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin.
Signs and symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Potential environmental effects See ECOLOGICAL INFORMATION, Section 12.

3.Composition / Information on Ingredients

Components CAS # Percent
Acetone
67-64-1 100

4.First Aid Measures

First aid procedures
Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin contact Immediately flush skin with plenty of water. Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
Inhalation Move to fresh air. If breathing is difficult, trained personnel should give oxygen. If not breathing, give artificial respiration. Seek immediate medical attention/advice.

Ingestion Seek immediate medical attention/advice. Do not induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Notes to physician Aspiration hazard. This product is a CNS depressant.
General advice If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties Extremely flammable liquid and vapor. This material may be ignited by heat, sparks, flames, or other sources of ignition (e.g static electricity, pilot lights, or mechanical / electrical equipment). Vapors are heavier than air and may spread along floors. Vapors may travel considerable distance to a source of ignition and flash back. Heat may cause the containers to explode. Vapors may form explosive mixtures with air.
Extinguishing media Suitable extinguishing media
Unsuitable extinguishing media
Protection of firefighters Specific hazards arising from the chemical
Protective equipment for firefighters
Fire fighting equipment/instructions
Explosion data Sensitivity to static discharge
Sensitivity to mechanical impact
Hazardous combustion products
Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.
Fire may produce irritating, corrosive and/or toxic gases.
Firefighters should wear full protective clothing including self contained breathing apparatus.
In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.
May be sensitive to static discharge.
Not expected to be sensitive to mechanical impact. Carbon oxides. Other unidentified organic compounds.

6. Accidental Release Measures

Personal precautions Wear appropriate protective equipment and clothing during clean-up. Ventilate the contaminated area. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. See Section 8 of the MSDS for Personal Protective Equipment.
Environmental precautions For large (industrial) releases, prevent spill from entering a waterway.
Methods for containment Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
Methods for cleaning up Ventilate the contaminated area. Remove sources of ignition. Use only non-sparking tools. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand). Local authorities should be advised if significant spillages cannot be contained. For waste disposal, see section 13 of the MSDS.
Other information Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. All equipment used when handling the product must be grounded. Avoid breathing mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. When using do not eat or drink. Do not use in areas without adequate ventilation. Wash thoroughly after handling. Avoid release to the environment.

Storage Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a closed container away from incompatible materials. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the MSDS). Keep in an area equipped with sprinklers. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Occupational exposure limits
US. ACGIH Threshold Limit Values
Material Type
Value
Acetone
STEL 750 ppm
TWA 500 ppm
Components Type
Value
Acetone (CAS 67-64-1)
STEL 750 ppm
TWA 500 ppm
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Material Type
Value
Acetone
PEL 2400 mg/m3
1000 ppm
Components Type
Value
Acetone (CAS 67-64-1)
Biological limit values
ACGIH Biological Exposure Indices
PEL 2400 mg/m3
1000 ppm
Material
Value
Determinant Specimen Sampling Time
Acetone
50 mg/l Acetone Urine *
Components
Value
Determinant Specimen Sampling Time
Acetone (CAS 67-64-1)
50 mg/l Acetone Urine *
* - For sampling details, please see the source document.
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. Ensure adequate ventilation, especially in confined areas.
Personal protective equipment
Eye/face protection Chemical goggles and face shield are recommended. Eye wash fountain and emergency showers are recommended.
Skin protection Wear chemical protective equipment that is specifically recommended by the manufacturer. Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.Impervious gloves. Advice should be sought from glove suppliers.
Respiratory protection Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. A NIOSH/MSHA approved air-purifying respirator with the appropriate chemical cartridges or a positive-pressure, air-supplied respirator may be used to reduce exposure. Advice should be sought from respiratory protection specialists.
Hand protection Gloves impervious to the material are recommended. Advice should be sought from glove suppliers.

9. Physical & Chemical Properties

Appearance Liquid.
Physical state Liquid.
Form Liquid.
Color Clear colorless or nearly colorless
Odor Strong. Sweet
Odor threshold Not available.
pH Not available
Vapor pressure 24.7 kPa
Vapor density Not available.
Boiling point 132.8 °F (56 °C) **Melting point/Freezing point** -138.46 °F (-94.7 °C) **Solubility (water)** Miscible
Specific gravity 0.79
Relative density Not available.
Flash point -0.4 °F (-18.0 °C)
Flammability limits in air, upper, % by volume
Flammability limit - upper (%) temperature
Flammability limits in air, lower, % by volume
Flammability limit - lower (%) temperature
Not available. 55.04 °F (12.8 °C)
Not available. 36.68 °F (2.6 °C)
Auto-ignition temperature 869 °F (465 °C)
Evaporation rate Not available.
Viscosity 0.4 mm²/s
Partition coefficient (n-octanol/water)
-0.2
Molecular weight 58.08
Molecular formula C3-H6-O
Other data
Density 0.79 g/cm3
Dynamic viscosity 0.32 mPa.s
Dynamic viscosity temp 68 °F (20 °C)
Heat of combustion (NFPA 30B)
27.7 kJ/g
Kinematic viscosity 0.4052 mm²/s estimated
Surface tension 23.46

10. Chemical Stability & Reactivity Information

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Conditions to avoid Keep away from heat, sparks and open flame. Keep away from direct sunlight. Avoid contact with incompatible materials.
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products
Possibility of hazardous reactions
No hazardous decomposition products are known. The following may be released during a fire: Carbon oxides. Organic compounds.
Hazardous polymerization does not occur.

11. Regulatory Information

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
WHMIS status Controlled
WHMIS classification B2 - Flammable Liquids
D2B - Other Toxic Effects-TOXIC
WHMIS labeling
International Inventories
Country(s) or region Inventory name On inventory (yes/no)*
Australia Australian Inventory of Chemical Substances (AICS)
Canada Domestic Substances List (DSL)
Canada Non-Domestic Substances List (NDSL)

China Inventory of Existing Chemical Substances in China (IECSC)
Europe European Inventory of Existing Commercial Chemical Substances (EINECS)
Europe European List of Notified Chemical Substances (ELINCS)
Japan Inventory of Existing and New Chemical Substances (ENCS)
Korea Existing Chemicals List (ECL)
New Zealand New Zealand Inventory
Philippines Philippine Inventory of Chemicals and Chemical Substances (PICCS)
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory
*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
Yes Yes No Yes Yes
No Yes Yes Yes Yes
Yes
A "No" indicate

12.Other Information

HMIS® ratings Health: 4* Flammability: 3
Physical hazard: 0
NFPA ratings Health: 1 Flammability: 3
Instability: 0
Disclaimer Prepared by: ICC The Compliance Center Inc. 1-888-442-9628 http://www.thecompliancecenter.com
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Legend to abbreviations and acronyms used in the SDS
This data sheet contains changes from the previous version in section(s):
This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Comet Chemical Ltd.
ACGIH: American Conference of Governmental Industrial Hygienists CAS: Chemical Abstract Services
CEPA: Canadian Environmental Protection Act CPR: Controlled Products Regulation
DSL: Domestic Substance List
HMIS: Hazardous Materials Identification System IARC: International Agency for Research on Cancer IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods
IUCLID: International Uniform Chemical Information Database LC: Lethal Concentration
LD: Lethal Dose
NIOSH: National Institute of Occupational Safety and Health NTP: National Toxicology Program
OECD: Organisation for Economic Co operation and Development SARA: Superfund Amendments and Reauthorization Act
TDG: Canadian Transportation of Dangerous Goods Act & Regulations TWA: Time Weighted Average
STEL: Short Term Exposure Limit
Product and Company Identification: Product and Company Identification Composition / Information on Ingredients: Ingredients
Transport Information: Material Transportation Information
References Canadian Centre for Occupational Health and Safety, CCInfoWeb Databases, 2014 (Chempendium, RTECs, HSDB, INCHEM)
European Chemicals Agency, Classification Legislation, 2014. Material Safety Data Sheet from manufacturer.
OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2014.