

July 8, 2015

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: 0610 1
Product Code: B11560
MSDS Date: July 8, 2015

Axis AURO610-1

General Information:
CHEMTREC: 712-737-4993

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

GHS Classification:

Flammable liquids, (Category 2)
Eye irritation, (Category 2A)
Skin irritation (Category 2)
Reproductive toxicity (Category 2)
Specific target organ toxicity - single exposure (Category 3), Central nervous system
Specific target organ toxicity - repeated exposure (Category 2)
Aspiration hazard (Category 1)

GHS Labeling



Symbol:

Signal Word: Danger

Hazard Statements:

Highly flammable liquid and vapor
Causes serious eye irritation
Causes skin irritation.
Suspected of damaging fertility or the unborn child
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure
May be fatal if swallowed and enters airways

Precautionary Statements:

Prevention:

Do not breathe mist/vapors/spray.
Do not handle until all safety precautions have been read and understood.
Ground/bond container and receiving equipment.
Keep away from heat/sparks/open flames/hot surfaces-no smoking.
Keep container tightly closed.
Obtain special instructions before use.
Take precautionary measure against static discharge.
Use only non-sparking tools.

Use only outdoors or in a well-ventilated area.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Response:

Call a poison center/doctor if you feel unwell.

Do NOT induce vomiting.

Get medical advice/attention if you feel unwell.

If exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water shower.

If skin irritation occurs: Get medical advice/attention.

If swallowed: Immediately call a poison center/doctor.

In case of fire: Use carbon dioxide, water spray mist or foam, dry chemical to extinguish.

Take off contaminated clothing and wash it before reuse.

Storage:

Store in a well-ventilated place. Keep cool.

Store locked up.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Potential Health Effects: See Section 11 for more information

This product contains carcinogens or potential carcinogens as listed by IARC, NTP, or ACGIH.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: See Section 12 for more information.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

No.	Component CAS REG. NO.	Amount %	OSHA		ACGIH	
			TWA	STEL	TWA	STEL
1	Xylene CAS #1330-20-7	1-50	100 ppm	150 ppm	100 ppm	150 ppm
2	Toluene CAS #108-88-3	1-50	200 ppm	Not Available	20 ppm	Not Available
3	Light Hydrotreated Distillate CAS# 68410-97-9	1-50	5 mg/m3 MIST	Not Avail	5 mg/m3	Not Avail
4	Isobutyl Acetate CAS # 110-19-0	1-50	150 ppm	Not Avail	150 ppm	Not Avail
5	Normal Butyl Acetate CAS # 123-86-4	1-50	150 ppm	Not Avail	150 ppm	200 ppm
6	PM Acetate CAS # 108-65-6	1-50	Not Avail	Not Avail	Not Avail	Not Avail
7	Ethylbenzene CAS #100-41-4	1-50	100 ppm	125 ppm	100 ppm	125 ppm

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8	Acetone CAS #67-64-1	1-50	750 ppm	Not Availab le	500 ppm	Not Availab le
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Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

- Inhalation:** Move to fresh air in case of accidental inhalation of vapors from overheating or combustion. If symptoms persist, call a physician.
- Ingestion:** Call a physician or Poison Control Centre immediately. Do not induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.
- Skin:** Wash off with soap and plenty of water. Remove contaminated clothing, and any extraneous chemical. Get medical attention if irritation persists.
- Eyes:** Immediately flush eyes with water for at least 20 minutes while holding eyelids open. Remove contact lenses. Get medical attention if irritation persists.

Section 5: FIRE FIGHTING MEASURES

Flash Point:	-17°C (1.4°F)
Auto-ignition Temperature:	465°C (869°F)
Upper Explosion Limit:	12.8%
Lower Explosion Limit:	2.5%
Flammability Classification:	Flammable Liquid IB

Suitable Extinguishing Media:

Use methods appropriate for the surrounding fire. Consider carbon dioxide, water spray mist or foam, dry chemical.

Products of Combustion:

Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, and hydrocarbon fragments.

Fire Fighting Equipment/Instructions:

A face shield should be worn. Use personal protective equipment. Wear self-contained breathing apparatus for fire-fighting if necessary. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.

Specific Hazards:

Take precautionary measures against static discharges. Explosive vapor could form. Highly flammable. Vapors are toxic when inhaled.

HAZARD	HMIS	NFPA
Toxicity	2	2
Fire	3	3
Reactivity	0	0

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: For large spills wear gloves, Tyvek suits, safety glasses, and appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Special Properties: Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with

adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.

Environmental Precautions: Prevent discharge to open bodies of water, municipal sewers, and watercourses.

Method for Containment: Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth. Control runoff and isolate discharged material for proper disposal. Approach release from upwind.

Methods for Clean-up: Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container.

Section 7: HANDLING AND STORAGE

Handling:

Keep away from heat, sparks and flame. Use only with adequate ventilation.

To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Storage:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Keep away from acids and oxidizers.

Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protective Equipment (PPE)

Respiratory Protection: Wear appropriate respirator when ventilation is inadequate.

Eye/Face Protection: Splash proof chemical goggles and face shield.

Hand Protection: Impervious solvent gloves, the breakthrough time of the selected glove(s) must be greater than the intended use period.

Body: Avoid skin contact. If product comes in contact with clothing, immediately remove soaked clothing and shower. Wear long sleeve shirts and trousers without cuffs. Solvent resistant apron if splashes are likely to occur, wear flame retardant protective clothing solvent resistant apron and boots.

Other Protective Equipment:

Facilities storing or utilizing this material should be equipped with eyewash and safety shower facilities.

See section 3 for exposure limits.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance, State	Clear liquid
Color	Clear
Odor	Acetone, Strong
pH (1% soln/water)	Not available
Vapor Density (acetone)	2.0 (air = 1)
Boiling Point (acetone)	56.05°C at 1013.25 hPa
Vapor Pressure (acetone)	233 hPa at 20°C
Melting Point/freezing point (acetone)	-94.7°C
Flash Point (See Section 5)	

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Flammability Properties (See section 5)

Solubility (in water) Soluble
Specific Gravity(acetone) 0.7854
Evaporation Rate (acetone) 5-6 (butyl acetate = 1)
Octanol/Water partition coefficient (Kow) (acetone): -0.24
Auto-ignition temperature (acetone): 465C
Decomposition temperature (acetone): Not available
Viscosity: Not available

Section 10: STABILITY AND REACTIVITY

Stability: This material is considered stable at ambient temperatures 70°C (21°C).

Condition to Avoid: Flames, sparks, electrostatic discharge, heat and other ignition sources.

Incompatible Materials: This product reacts with reactive metals (eg. Sodium, calcium, zinc etc), materials reactive with hydroxyl compounds, and oxidizing agents.

Hazardous Decomposition: Upon decomposition, this product evolves carbon monoxide, carbon dioxide, aldehydes, and flammable hydrocarbon fragments (eg acetylene).

Hazardous Reactions: This product will not undergo polymerization.

Section 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

Component Analysis LD50

Acetone (67-64-1)

Oral LD50 Rat: 5800 mg/kg

LC50 Inhalation - rat - 8 h - 50,100 mg/m³

LD50 Dermal - guinea pig - 7,426 mg/kg

Skin - rabbit - Mild skin irritation - 24 h

Eyes - rabbit - Eye irritation - 24 h

Xylene (1330-20-7)

Inhalation LC50 Rat 5000 ppm 4 h;

Inhalation LC50 Rat 47635 mg/L 4 h;

Oral LD50 Rat 4300 mg/kg;

Dermal LD50 Rabbit >1700 mg/kg

Isobutyl Acetate (110-19-0)

Oral LD50 Rat 13400 mg/kg

Inhalation LC50 Rat >13.2 mg/l

Acute Dermal Rabbit <17400 mg/kg

PM Acetate (108-65-6)

Oral LD50 Rat 8500 mg/kg (female)

Oral LD50 Rat 10,000 mg/kg (male)

Inhalation LC50 Rat 4345 ppm

Skin Rabbit LD50 5000 mg/kg

n-butyl acetate (123-86-4)

LD50 Oral - rat - 10,700 - 14,130 mg/kg

LC50 Inhalation - rat - 4 h - > 21.0 mg/l

LD50 Dermal - rabbit - 17,600 mg/kg

CHRONIC EFFECTS:

Component

Acetone (67-64-1)

Carcinogenicity: ACGIH A4 – Not Classifiable as a Human Carcinogen

Neurotoxicity: This product contains Acetone, a central nervous system target.

Mutagenicity: No information available for product.

Reproductive: Prolonged skin contact may defat the skin and produce dermatitis in a study of pregnant rats and mice exposed to acetone vapor during 6-19 of gestation, slight developmental toxicity was observed. Reports of other reproductive effects of acetone include observations of testicular effects and changes of sperm quality in rats.

Developmental: No information available for product.

Target Organs: Acetone can target the respiratory system, eyes, CNS, kidneys, hematology. Narcosis; CNS depression; eye, nose throat, and skin irritation. Harmful if swallowed or inhaled. Can cause CNS depression, drowsiness, narcosis, or asphyxiation. **Skin Contact:** Repeated exposure may cause skin dryness or cracking in human volunteers, topical application of acetone for 30 to 90 minutes produced considerable skin damage with high degree restoration after 72 hours. **Eye contact:** Can cause severe eye irritation. **Inhalation:** Health effects reported in humans caused by inhalation include increase in visual reaction time and decrease in dual response task at 250 ppm; mucous membrane irritation, heavy eyes, headache, and general weakness accompanied by blood changes at 500 ppm; chronic inflammation of airways, stomach and duodenum at 1000 ppm; and severe toxic effects at 4000 ppm. Acetone is readily absorbed into blood stream. **Ingestion:** Symptoms of ingestion include nausea, vomiting, gastric hemorrhage, sedation, respiratory depression, ataxia, and paresthesia.

Xylene (1330-20-7)

Carcinogenic Effects: A4 - Not classifiable for human or animal by ACGIH, IARC, or OSHA.

Mutagenic Effects: Xylenes have not demonstrated genotoxic activity in animals or humans and do not appear to be immunotoxic.

Teratogenic Effects: Not Available

Developmental Toxicity: Not Available

Target Organs: Nervous system, respiratory system. From the animal and human toxicology data, xylenes can be characterized as neurotoxic chemicals at moderate to high doses inducing symptoms in humans of dizziness, headache, nausea, and neuromuscular effects, speech impairment, and amnesia at high doses. Aspiration into the lungs of even a small amount may cause severe injury, since its low viscosity and surface tension will cause it to spread over a large surface of pulmonary tissue. Aspiration into the lungs of even a small amount may cause severe injury, since its low viscosity and surface tension will cause it to spread over a large surface of pulmonary tissue. **Eyes:** Irritation from vapors. Splash accidents have produced transient, superficial injury to the eye. **Skin:** May cause skin irritation. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. **Inhalation** Central nervous system depression, narcosis, respiratory tract irritation & pulmonary edema. Severe exposure may cause death. **Ingestion** Aspiration hazard if swallowed. Can enter lungs and cause damage. May be fatal if swallowed. Central nervous system depression, a burning sensation in the oropharynx and stomach. Vomiting. **Potential Chronic Health Effects** Effects of chronic exposure to xylene are similar to those of acute exposure, particularly central nervous system effects (based on animal studies). **Overexposure/Signs/Symptoms:** Headache, tremors, apprehension, memory loss, weakness, dizziness, loss of appetite, nausea, ringing in the ears, irritability, thirst, anemia, mucosal bleeding, enlarged liver, and hyperplasia are reported when chronic inhalation of xylenes has occurred. Repeated contact with the skin can cause defatting dermatitis. Reversible eye damage, including vacuoles in the cornea and conjunctiva, has occurred with chronic xylene exposure.

Isobutyl Acetate (110-19-0)

Carcinogenicity: Not classifiable for human or animal by ACGIH, IARC, or OSHA.

Neurotoxicity: No information available for product

Mutagenicity: Not mutagenic in vitro (Ames Test)

Reproductive: No information available for product.

Developmental: No information available for product.

Target Organs: No information available for product

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PM Acetate (108-65-6)

Carcinogenicity: ACGIH A4 – Not Classifiable as a Human Carcinogen

Neurotoxicity: No information available for product

Mutagenicity: No information available for product.

Reproductive: No information available for product.

Developmental: No information available for product.

Target Organs: **Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Ingestion May be harmful if swallowed.

Ethylbenzene CAS#100-41-4

Carcinogenic Effects: 2B – Group 2B: Possibly carcinogenic to humans

Mutagenic Effects: Not Available

Teratogenic Effects: Not Available

Developmental Toxicity: Not Available

Target Organs: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin Causes skin irritation.

Eyes Causes eye irritation.

n-butyl acetate (123-86-4)

Carcinogenic Effects: No component is identified by IARC, ACGIH, NTP, or OSHA

Mutagenic Effects: Not Available

Teratogenic Effects: Developmental Toxicity - rat - Inhalation

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental

Abnormalities: Musculoskeletal system.

Developmental Toxicity: Not Available

Target Organs: **Inhalation** May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Light Hydrotreated Distillate (68410-97-9)

Carcinogenic Effects: Not listed on the NTP, IARC, OSHA, or ACGIH lists of suspected/confirmed carcinogens.

Mutagenic Effects: Not Available.

Teratogenic Effects: Not Available

Developmental Toxicity: Not Available

Target Organs: Aspiration hazard if swallowed – can enter the lungs and cause damage. Harmful if inhaled and may cause delayed lung injury. Avoid contact with eyes, skin, and clothing. Material splashed into the eyes will irritate tissues. Unprotected exposure will cause skin dryness. **Skin** – tests on similar materials indicate acute irritation is expected to occur upon short-term exposure, chronic dermatitis on prolonged contact. **Ingestion** – Acute aspiration hazard. Tests on similar material indicate possibility of the following symptoms: headache, nausea, drowsiness, fatigue, pneumonitis, pulmonary edema, central nervous system depression, convulsions, and loss of consciousness. **Inhalation** – Tests on similar material indicate the possibility of the following symptoms: headache, nasal and respiratory irritation, nausea, drowsiness, breathlessness, fatigue, central nervous system depression, convulsions, and loss of consciousness.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Acetone(67-64-1)

96 hour LC50 *Oncorhynchus mykiss*: 5540 mg/L (static)

96 hour LC50 *Pimephales promelas*: 6210 mg/L [flow through]

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96 hour LC50 *Lepomis macrochirus*: 8300 mg/L [static] 15
min EC50 *Photobacterium phosphoreum*: 14,500 mg/L 48
Hr EC50 water flea: 0.0039 mg/L
48 hour EC50 water flea: 12,700 mg/L [static]
48 hour EC50 *Daphnia magna*: 12,600 mg/L

Ecotoxicity: Xylene(1330-20-7)

96 Hr LC50 *Pimephales promelas*: 13.4 mg/L [flow-through];
96 Hr LC50 *Oncorhynchus mykiss*: 2.661-4.093 mg/L [static];
96 Hr LC50 *Oncorhynchus mykiss*: 13.5-17.3 mg/L;
96 Hr LC50 *Lepomis macrochirus*: 13.1-16.5 mg/L [flow-through];
96 Hr LC50 *Lepomis macrochirus*: 19mg/L;
96 Hr LC50 *Lepomis macrochirus*: 7.711- 9.591 mg/L [static];
96 Hr LC50 *Pimephales promelas*: 23.53-29.97 mg/L [static];
96 Hr LC50 *Cyprinus carpio*: 780 mg/L [semi-static];
96 Hr LC50 *Cyprinus carpio*: >780 mg/L;
96 Hr LC50 *Poecilia reticulata*: 30.26-40.75 mg/L [static]
48 Hr EC50 water flea: 3.82 mg/L;
48 Hr LC50 *Gammarus lacustris*: 0.6 mg/L
48 Hr EC50 water flea: 3.82 mg/L;
48 Hr LC50 *Gammarus lacustris*: 0.6 mg/L

Ecotoxicity: Isobutyl Acetate (110-19-0)

Fish (*Leuciscus idus*) 48-hr. LC50 = 190 ppm.
Fish (*Leuciscus idus melanotus*) 48-hr. LC50 = 101 to 123 ppm.
Crustacean (*Daphnia magna*) 24-hr. EC50 = 168 to 342 ppm.
Crustacean (*Artemia salina*) 24-hr. EC50 = 1200 ppm.
Algae (*Scenedesmus quadricauda*) 8-hr. Toxicity Threshold = 80 ppm.
Algae (*Microcystis aeruginosa*) 8-hr. TT = 205 ppm.
Protozoa (*Chilomonas paramecium*) 48-hr. TT = 600 ppm.
Protozoa (*Entosiphon sulcatum*) 72-hr. TT = 411 ppm.
Protozoa (*Uronema parduzci*) 20-hr. TT = 727 ppm.
Bacteria (*Pseudomonas putida*) 16-hr. TT = 200 ppm.

Ecotoxicity: PM Acetate (108-65-6)

96 h LC-50 (fathead minnow): 161 mg/l 48 h LC-50 (daphnid): 408 mg/l

Ecotoxicity n-butyl acetate (123-86-4)

LC50 - *Lepomis macrochirus* (Bluegill) - 100 mg/l - 96 h
EC50 - *Daphnia magna* (Water flea) - 72.8 - 205.0 mg/l - 24 h

Section 13: DISPOSAL CONSIDERATIONS

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

Section 14: TRANSPORT INFORMATION

Proper Shipping Name: Paint related material

Hazard Class: 3

Identification No.: UN1263

Packing Group: II

Label: Flammable

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Section 15: REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

SARA 302/304 The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

SARA 313: Xylene 1330-20-7, Hexane 110-54-3, Cyclohexane 110-82-7, Toluene 108-88-3, Ethylbenzene 100-41-4

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: Acetone [CAS No. 67-64-1] RQ = 5,000 lbs, Xylene [CAS No.: 1330-20-7] RQ = 100 lbs (45.3 kg), Toluene [CAS No. 108-88-3] RQ = 1,000 lbs, isobutyl alcohol [CAS No. 110-19-1] RQ = 5,000 lbs, Butyl Acetate [CAS No. 123-86-4] RQ = 5,000 lbs, Ethylbenzene [CAS No. 100-41-4] RQ = 1,000 lbs

SARA 311/312 Hazard The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Immediate (Acute) Health Hazard, Fire Hazard

California Prop 65: Toluene developmental toxicity, Ethylbenzene cancer toxicity

Section 16: OTHER SUPPLEMENTAL INFORMATION

Prepared by: Chemisphere Corp. on 5/23/14

Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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