

SAFETY DATA SHEET

SEPTONE AEROSOL ETCH PRIMER

Infosafe No.: IG0AE
ISSUED Date : 23/09/2016
ISSUED by: ITW AAMTECH

1. IDENTIFICATION

GHS Product Identifier

SEPTONE AEROSOL ETCH PRIMER

Product Code

AAEP400

Company Name

ITW AAMTECH (ABN 63 004 235 063)

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Recommended use of the chemical and restrictions on use

Application is by spray atomisation from a hand held aerosol pack
Single pack acid etch, epoxy zinc phosphate primer, aerosol form.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Acute Toxicity - Inhalation: Category 4

Eye Damage/Irritation: Category 2A

Flammable Aerosol: Category 1

Gases under Pressure: Compressed Gas

Hazardous to the Aquatic Environment - Acute Hazard: Category 3

Skin Corrosion/Irritation: Category 2

STOT Repeated Exposure: Category 2

STOT Single Exposure: Category 3 (narcotic)

STOT Single Exposure: Category 3 (respiratory tract irritation)

Toxic to Reproduction: Category 1B

Signal Word (s)

DANGER

Hazard Statement (s)

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H402 Harmful to aquatic life
AUH044 Risk of explosion if heated under confinement

Precautionary Statement (s)

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

Pictogram (s)

Flame, Gas cylinder, Exclamation mark, Health hazard



Precautionary statement – Prevention

P201 Obtain special instructions before use.

Precautionary statement – Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P362 Take off contaminated clothing and wash before reuse.

Precautionary statement – Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P410+P403 Protect from sunlight. Store in a well-ventilated place.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Precautionary statement – Disposal

P501 Dispose of contents/container in accordance with local regulations.

Other Information

Classification [1]: Aerosols Category 1, Gas under Pressure (Compressed gas), Acute Toxicity (Inhalation) Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Reproductive Toxicity Category 1B, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Specific target organ toxicity - single exposure Category 3 (narcotic effects), Specific target organ toxicity - repeated exposure Category 2, Acute Aquatic Hazard Category 3

Legend: 1. Classified by ; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

3. COMPOSITION/INFORMATION ON INGREDIENTS

Information on Composition

Substances

See section below for composition of Mixtures

NOTE: Manufacturer has supplied full ingredient information to allow assessment.

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Ingredients

Name	CAS	Proportion
Toluene	108-88-3	30-60 %
Isopropanol	67-63-0	30-60 %
Xylene	1330-20-7	10-30 %
Methyl ethyl ketone	78-93-3	0-10 %
n-Butanol	71-36-3	0-10 %
Phosphoric acid	7664-38-2	0-1 %
Dimethyl ether	115-10-6	10-30 %
ingredients determined not to be hazardous	Not Available	0-10 %

4. FIRST-AID MEASURES

Inhalation

If aerosols, fumes or combustion products are inhaled:

Remove to fresh air.

Lay patient down. Keep warm and rested.

Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.

If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

Transport to hospital, or doctor.

Ingestion

If swallowed do NOT induce vomiting.

If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Observe the patient carefully.

Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.

Seek medical advice.

Skin

If skin contact occurs:

Immediately remove all contaminated clothing, including footwear.

Flush skin and hair with running water (and soap if available).

Seek medical attention in event of irritation.

Eye contact

If aerosols come in contact with the eyes:

Immediately hold the eyelids apart and flush the eye with fresh running water.

Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Seek medical attention without delay; if pain persists or recurs seek medical attention.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Indication of immediate medical attention and special treatment needed if necessary

Treat symptomatically.

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.

Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen.

Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ 50 mm Hg) should be intubated.

Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.

A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.

Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol stable foam.

Dry chemical powder.

BCF (where regulations permit).

Carbon dioxide.

Specific Methods

Alert Fire Brigade and tell them location and nature of hazard.

May be violently or explosively reactive.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water course.

Specific Hazards Arising From The Chemical

Fire Incompatibility

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Fire/Explosion Hazard

Liquid and vapour are highly flammable.

Severe fire hazard when exposed to heat or flame.

Vapour forms an explosive mixture with air.

Severe explosion hazard, in the form of vapour, when exposed to flame or spark.

Combustion products include: carbon dioxide (CO₂), phosphorus oxides (PO_x), other pyrolysis products typical of burning organic material

Decomposition Temperature

Not Available

Extinguishing Media - Small Fires

Water spray, dry chemical or CO₂

Extinguishing Media - Large Fires

Water spray or fog.

6. ACCIDENTAL RELEASE MEASURES

Clean-up Methods - Small Spillages

Clean up all spills immediately.

Avoid breathing vapours and contact with skin and eyes.

Wear protective clothing, impervious gloves and safety glasses.

Shut off all possible sources of ignition and increase ventilation.

Clean-up Methods - Large Spillages

Clear area of personnel and move upwind.

Alert Fire Brigade and tell them location and nature of hazard.

May be violently or explosively reactive.

Wear breathing apparatus plus protective gloves.

Other Information

Personal Protective Equipment advice is contained in Section 8 (EXPOSURE CONTROLS/PERSONAL PROTECTION) of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Safe handling

Avoid all personal contact, including inhalation.

Wear protective clothing when risk of exposure occurs.

Use in a well-ventilated area.

Prevent concentration in hollows and sumps.

Other information

Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can

Store in original containers in approved flammable liquid storage area.

DO NOT store in pits, depressions, basements or areas where vapours may be trapped.

No smoking, naked lights, heat or ignition sources.

Keep containers securely sealed.

Conditions for safe storage, including any incompatibilities

Suitable container

Aerosol dispenser.

Check that containers are clearly labelled.

Storage incompatibility

Avoid storage with oxidisers

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source: Australia Exposure Standards

Ingredient: toluene

Material name: Toluene

TWA: 191 mg/m³ / 50 ppm

STEL: 574 mg/m³ / 150 ppm

Peak: Not Available

Notes: Sk

Source: Australia Exposure Standards

Ingredient: isopropanol

Material name: Isopropyl alcohol

TWA: 983 mg/m³ / 400 ppm

STEL: 1230 mg/m³ / 500 ppm

Peak: Not Available

Notes: Not Available

Source: Australia Exposure Standards

Ingredient: xylene

Material name: Xylene (o-, m-, p-isomers)

TWA: 350 mg/m³ / 80 ppm

STEL: 655 mg/m³ / 150 ppm

Peak: Not Available

Notes: Not Available

Source: Australia Exposure Standards

Ingredient: methyl ethyl ketone

Material name: Methyl ethyl ketone (MEK)

TWA: 445 mg/m³ / 150 ppm

STEL: 890 mg/m³ / 300 ppm
Peak: Not Available
Notes: Not Available

Source: Australia Exposure Standards
Ingredient: n-butanol
Material name: n-Butyl alcohol
TWA: Not Available
STEL: Not Available
Peak: 152 mg/m³ / 50 ppm
Notes: Sk

Source: Australia Exposure Standards
Ingredient: phosphoric acid
Material name: Phosphoric acid
TWA: 1 mg/m³
STEL: 3 mg/m³
Peak: Not Available
Notes: Not Available

Source: Australia Exposure Standards
Ingredient: dimethyl ether
Material name: Dimethyl ether
TWA: 760 mg/m³ / 400 ppm
STEL: 950 mg/m³ / 500 ppm
Peak: Not Available
Notes: Not Available

EMERGENCY LIMITS

Ingredient: toluene
Material name: Toluene
TEEL-1: Not Available
TEEL-2: Not Available
TEEL-3: Not Available

Ingredient: isopropanol
Material name: Isopropyl alcohol
TEEL-1: 400 ppm
TEEL-2: 400 ppm
TEEL-3: 12000 ppm

Ingredient: xylene
Material name: Xylenes
TEEL-1: Not Available
TEEL-2: Not Available
TEEL-3: Not Available

Ingredient: methyl ethyl ketone
Material name: Butanone, 2-; (Methyl ethyl ketone; MEK)
TEEL-1: Not Available
TEEL-2: Not Available
TEEL-3: Not Available

Ingredient: n-butanol
Material name: Butyl alcohol, n-; (n-Butanol)
TEEL-1: 20 ppm
TEEL-2: 50 ppm
TEEL-3: 8000 ppm

Ingredient: phosphoric acid

Material name: Phosphoric acid
TEEL-1: Not Available
TEEL-2: Not Available
TEEL-3: Not Available

Ingredient: dimethyl ether
Material name: Methyl ether; (Dimethyl ether)
TEEL-1: 1,000 ppm
TEEL-2: 1000 ppm
TEEL-3: 7200 ppm

Ingredient: toluene
Original IDLH: 2,000 ppm
Revised IDLH: 500 ppm

Ingredient: isopropanol
Original IDLH: 12,000 ppm
Revised IDLH: 2,000 [LEL] ppm

Ingredient: xylene
Original IDLH: 1,000 ppm
Revised IDLH: 900 ppm

Ingredient: methyl ethyl ketone
Original IDLH: 3,000 ppm
Revised IDLH: 3,000 [Unch] ppm

Ingredient: n-butanol
Original IDLH: 8,000 ppm
Revised IDLH: 1,400 [LEL] ppm

Ingredient: phosphoric acid
Original IDLH: 10,000 mg/m³
Revised IDLH: 1,000 mg/m³

Ingredient: dimethyl ether
Original IDLH: Not Available
Revised IDLH: Not Available

Ingredient: Ingredients determined not to be hazardous
Original IDLH: Not Available
Revised IDLH: Not Available

Appropriate Engineering Controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Respiratory Protection

Type BAX-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Eye Protection

No special equipment for minor exposure i.e. when handling small quantities.

OTHERWISE: For potentially moderate or heavy exposures:

Safety glasses with side shields.

NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them.

Hand Protection

No special equipment needed when handling small quantities.

OTHERWISE:

For potentially moderate exposures:

Wear general protective gloves, eg. light weight rubber gloves.

For potentially heavy exposures:

Wear chemical protective gloves, eg. PVC. and safety footwear.

Personal Protective Equipment

Other protection

No special equipment needed when handling small quantities.

OTHERWISE:

Overalls.

Skin cleansing cream.

Eyewash unit.

The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton.

Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost.

BRETHERRICK: Handbook of Reactive Chemical Hazards.

Thermal Hazards

Not Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Aerosol - Liquid

Appearance

Supplied as an aerosol pack. Contents under PRESSURE. Contains highly flammable ether propellant.

| Grey highly flammable liquid with solvent odour; does not mix with water.

Odour

Not Available

Decomposition Temperature

Not Available

Boiling Point

Not Available

Solubility in Water

Immiscible

pH

Not Applicable (as supplied)

Not Applicable as a solution (1%)

Vapour Pressure

Not available.

Vapour Density (Air=1)

Not available.

Evaporation Rate

Not Available

Odour Threshold

Not Available

Viscosity

Not Available

Volatile Component

Not Available

Partition Coefficient: n-octanol/water

Not Available

Surface tension

Not Available

Flash Point

-41°C (propellant)

Flammability

HIGHLY FLAMMABLE.

Auto-Ignition Temperature

Not Available

Explosion Limit - Upper

18%

Explosion Limit - Lower

3.4%

Explosion Properties

Not Available

Molecular Weight

Not Available

Oxidising Properties

Not Available

Relative density

0.66 propellant

Melting/Freezing Point

Not Available

Other Information

Taste: Not Available

Gas group: Not Available

VOC g/L: Not Available

10. STABILITY AND REACTIVITY

Reactivity

See section 7 (HANDLING AND STORAGE)

Chemical Stability

Elevated temperatures.

Presence of open flame.

Product is considered stable.

Hazardous polymerisation will not occur.

Conditions to Avoid

See section 7 (HANDLING AND STORAGE)

Incompatible materials

See section 7 (HANDLING AND STORAGE)

Hazardous Decomposition Products

See section 5 (FIREFIGHTING MEASURES)

Possibility of hazardous reactions

See section 7 (HANDLING AND STORAGE)

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Septone Aerosol Etch primer

TOXICITY

Not Available
IRRITATION
Not Available

toluene

TOXICITY

Dermal (rabbit) LD50: 12124 mg/kg[2]
Inhalation (rat) LC50: >26700 ppm/1hr[2]
Inhalation (rat) LC50: 49 mg/L/4hr[2]
Oral (rat) LD50: 636 mg/kg[2]

IRRITATION

Eye (rabbit): 2mg/24h - SEVERE
Eye (rabbit):0.87 mg - mild
Eye (rabbit):100 mg/30sec - mild
Skin (rabbit):20 mg/24h-moderate
Skin (rabbit):500 mg - moderate

isopropanol

TOXICITY

Dermal (rabbit) LD50: 12792 mg/kg[1]
Inhalation (rat) LC50: 72.6 mg/L/4hr[2]
Oral (rat) LD50: 5000 mg/kg[2]

IRRITATION

Eye (rabbit): 10 mg - moderate
Eye (rabbit): 100 mg - SEVERE
Eye (rabbit): 100mg/24hr-moderate
Skin (rabbit): 500 mg - mild

xylene

TOXICITY

Dermal (rabbit) LD50: >1700 mg/kg[2]
Inhalation (rat) LC50: 5000 ppm/4hr[2]
Oral (rat) LD50: 4300 mg/kg[2]

IRRITATION

Eye (human): 200 ppm irritant
Eye (rabbit): 5 mg/24h SEVERE
Eye (rabbit): 87 mg mild
Skin (rabbit):500 mg/24h moderate

methyl ethyl ketone

TOXICITY

Dermal (rabbit) LD50: >8100 mg/kg[1]
Inhalation (rat) LC50: 23.5 mg/L/8hr[2]
Inhalation (rat) LC50: 50.1 mg/L/8 hr[2]
Oral (rat) LD50: 3474.9 mg/kg[1]

IRRITATION

- mild
Eye (human): 350 ppm -irritant
Eye (rabbit): 80 mg - irritant
Skin (rabbit): 402 mg/24 hr - mild
Skin (rabbit):13.78mg/24 hr open

n-butanol

TOXICITY

Dermal (rabbit) LD50: 3434.4 mg/kg[1]
Inhalation (rat) LC50: 24 mg/L/4hr[2]
Inhalation (rat) LC50: 8000 ppm/4hr[2]
Oral (rat) LD50: 2292.3 mg/kg[1]

IRRITATION

Eye (human): 50 ppm - irritant

Eye (rabbit): 1.6 mg-SEVERE
Eye (rabbit): 24 mg/24h-SEVERE
Skin (rabbit): 405 mg/24h-moderate

phosphoric acid

TOXICITY

Dermal (rabbit) LD50: >1260 mg/kg[2]
Inhalation (rat) LC50: 0.0255 mg/L/4hr[2]
Oral (rat) LD50: 1.7 ml[1]

IRRITATION

[Monsanto]*

Eye (rabbit): 119 mg - SEVERE
Skin (rabbit):595 mg/24h - SEVERE

dimethyl ether

TOXICITY

Inhalation (rat) LC50: 309 mg/L/4hr[2]

IRRITATION

Nil reported

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS.
Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

TOLUENE

For toluene:

Acute Toxicity

Humans exposed to intermediate to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis, and death. Similar effects are observed in short-term animal studies.

Humans - Toluene ingestion or inhalation can result in severe central nervous system depression, and in large doses, can act as a narcotic. The ingestion of about 60 mL resulted in fatal nervous system depression within 30 minutes in one reported case.

ISOPROPANOL

Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled.

XYLENE

Reproductive effector in rats

METHYL ETHYL KETONE

Methyl ethyl ketone is considered to have a low order of toxicity; however methyl ethyl ketone is often used in combination with other solvents and the toxic effects of the mix may be greater than either solvent alone. Combinations of n-hexane with methyl ethyl ketone and also methyl n-butyl ketone with methyl ethyl ketone show increase in peripheral neuropathy, a progressive disorder of nerves of extremities.

Combinations with chloroform also show increase in toxicity

N-BUTANOL

for n-butanol

Acute toxicity: n-Butanol (BA) was only slightly toxic to experimental animals following acute oral, dermal, or inhalation exposure. The acute oral LD50 values for female rats ranged from 790 to 4360 mg/kg. Different strains of rat were used in each of four studies, which may account for the variability. Oral LD50 values for mice, rabbits, hamsters, dogs, and male rats all fell within the same range.

PHOSPHORIC ACID

No significant acute toxicological data identified in literature search.

for acid mists, aerosols, vapours

Data from assays for genotoxic activity in vitro suggest that eukaryotic cells are susceptible to genetic damage when the pH falls to about 6.5. Cells from the respiratory tract have not been examined in this respect. Mucous secretion may protect the cells of the airways from direct exposure to inhaled acidic mists, just as mucous plays an important role in protecting the gastric epithelium

from its auto-secreted hydrochloric acid. In considering whether pH itself induces genotoxic events in vivo in the respiratory system, comparison should be made with the human stomach, in which gastric juice may be at pH 1-2 under fasting or nocturnal conditions, and with the human urinary bladder, in which the pH of urine can range from <5 to > 7 and normally averages 6.2. The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration. phosphoric acid (85%)

TOLUENE & ISOPROPANOL & XYLENE & METHYL ETHYL KETONE & N-BUTANOL

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

ISOPROPANOL & XYLENE

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

XYLENE & N-BUTANOL & PHOSPHORIC ACID

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

METHYL ETHYL KETONE & N-BUTANOL & PHOSPHORIC ACID

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.

Acute Toxicity: Data required to make classification available

Ingestion

Accidental ingestion of the material may be damaging to the health of the individual.

Not normally a hazard due to physical form of product.

Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Inhalation

Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.

If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.

WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.

Skin

This material can cause inflammation of the skin on contact in some persons.

The material may accentuate any pre-existing skin condition

Eye

This material can cause eye irritation and damage in some persons.

Skin corrosion/irritation

Data required to make classification available

Serious eye damage/irritation

Data required to make classification available

Mutagenicity

Data Not Available to make classification

Respiratory sensitisation

Data Not Available to make classification

Skin Sensitisation

Data Not Available to make classification

Carcinogenicity

Data Not Available to make classification

Reproductive Toxicity

Data required to make classification available

STOT-single exposure

Data required to make classification available

STOT-repeated exposure

Data required to make classification available

Aspiration Hazard

Data Not Available to make classification

Chronic Effects

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Ample evidence exists from experimentation that reduced human fertility is directly caused by exposure to the material.

Ample evidence exists, from results in experimentation, that developmental disorders are directly caused by human exposure to the material.

Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]

12. ECOLOGICAL INFORMATION

Ecological information

Toxicity

Ingredient: toluene

Endpoint: LC50

Test Duration (hr): 96

Species: Fish

Value: 0.0031704mg/L

Source: 4

Ingredient: toluene

Endpoint: EC50

Test Duration (hr): 48

Species: Crustacea

Value: 0.01151750mg/L

Source: 4

Ingredient: toluene

Endpoint: EC50

Test Duration (hr): 72

Species: Algae or other aquatic plants

Value: 12.5mg/L

Source: 4

Ingredient: toluene

Endpoint: BCF

Test Duration (hr): 24

Species: Algae or other aquatic plants

Value: 10mg/L

Source: 4

Ingredient: toluene

Endpoint: EC50

Test Duration (hr): 3

Species: Algae or other aquatic plants

Value: 0.1336030mg/L

Source: 4

Ingredient: toluene
Endpoint: NOEC
Test Duration (hr): 168
Species: Crustacea
Value: 0.74mg/L
Source: 2

Ingredient: isopropanol
Endpoint: LC50
Test Duration (hr): 96
Species: Fish
Value: 183.844mg/L
Source: 3

Ingredient: isopropanol
Endpoint: EC50
Test Duration (hr): 48
Species: Crustacea
Value: 12500mg/L
Source: 5

Ingredient: isopropanol
Endpoint: EC50
Test Duration (hr): 96
Species: Algae or other aquatic plants
Value: 993.232mg/L
Source: 3

Ingredient: isopropanol
Endpoint: EC50
Test Duration (hr): 384
Species: Crustacea
Value: 42.389mg/L
Source: 3

Ingredient: isopropanol
Endpoint: NOEC
Test Duration (hr): 5760
Species: Fish
Value: 0.02mg/L
Source: 4

Ingredient: xylene
Endpoint: LC50
Test Duration (hr): 96
Species: Fish
Value: 0.0013404mg/L
Source: 4

Ingredient: xylene
Endpoint: EC50
Test Duration (hr): 48
Species: Crustacea
Value: >3.4mg/L
Source: 2

Ingredient: xylene
Endpoint: EC50
Test Duration (hr): 72

Species: Algae or other aquatic plants
Value: 4.6mg/L
Source: 2

Ingredient: xylene
Endpoint: EC50
Test Duration (hr): 24
Species: Crustacea
Value: 0.711mg/L
Source: 4

Ingredient: xylene
Endpoint: NOEC
Test Duration (hr): 73
Species: Algae or other aquatic plants
Value: 0.44mg/L
Source: 2

Ingredient: methyl ethyl ketone
Endpoint: LC50
Test Duration (hr): 96
Species: Fish
Value: 228.130mg/L
Source: 3

Ingredient: methyl ethyl ketone
Endpoint: EC50
Test Duration (hr): 48
Species: Crustacea
Value: 308mg/L
Source: 2

Ingredient: methyl ethyl ketone
Endpoint: EC50
Test Duration (hr): 96
Species: Algae or other aquatic plants
Value: >500mg/L
Source: 4

Ingredient: methyl ethyl ketone
Endpoint: EC50
Test Duration (hr): 384
Species: Crustacea
Value: 52.575mg/L
Source: 3

Ingredient: methyl ethyl ketone
Endpoint: NOEC
Test Duration (hr): 48
Species: Crustacea
Value: 68mg/L
Source: 2

Ingredient: n-butanol
Endpoint: LC50
Test Duration (hr): 96
Species: Fish
Value: 88.462mg/L
Source: 3

Ingredient: n-butanol
Endpoint: EC50
Test Duration (hr): 48
Species: Crustacea
Value: >500mg/L
Source: 1

Ingredient: n-butanol
Endpoint: EC50
Test Duration (hr): 96
Species: Algae or other aquatic plants
Value: 225mg/L
Source: 2

Ingredient: n-butanol
Endpoint: BCF
Test Duration (hr): 24
Species: Fish
Value: 921mg/L
Source: 4

Ingredient: n-butanol
Endpoint: EC50
Test Duration (hr): 504
Species: Crustacea
Value: 18mg/L
Source: 2

Ingredient: n-butanol
Endpoint: NOEC
Test Duration (hr): 504
Species: Crustacea
Value: 4.1mg/L
Source: 2

Ingredient: phosphoric acid
Endpoint: LC50
Test Duration (hr): 96
Species: Fish
Value: 75.1mg/L
Source: 2

Ingredient: phosphoric acid
Endpoint: EC50
Test Duration (hr): 48
Species: Crustacea
Value: >100mg/L
Source: 2

Ingredient: phosphoric acid
Endpoint: EC50
Test Duration (hr): 72
Species: Algae or other aquatic plants
Value: 77.9mg/L
Source: 2

Ingredient: phosphoric acid
Endpoint: EC50
Test Duration (hr): 72
Species: Algae or other aquatic plants

Value: >100mg/L
Source: 2

Ingredient: phosphoric acid
Endpoint: NOEC
Test Duration (hr): 72
Species: Algae or other aquatic plants
Value: <7.5mg/L
Source: 2

Ingredient: dimethyl ether
Endpoint: LC50
Test Duration (hr): 96
Species: Fish
Value: 200.592mg/L
Source: 3

Ingredient: dimethyl ether
Endpoint: EC50
Test Duration (hr): 48
Species: Crustacea
Value: >4400.0mg/L
Source: 2

Ingredient: dimethyl ether
Endpoint: EC50
Test Duration (hr): 96
Species: Algae or other aquatic plants
Value: 154.917mg/L
Source: 2

Ingredient: dimethyl ether
Endpoint: EC50
Test Duration (hr): 384
Species: Crustacea
Value: 46.027mg/L
Source: 3

Ingredient: dimethyl ether
Endpoint: NOEC
Test Duration (hr): 48
Species: Crustacea
Value: >4000mg/L
Source: 1

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient: toluene
Persistence: Water/Soil: LOW (Half-life = 28 days)
Persistence: Air: LOW (Half-life = 4.33 days)

Ingredient: isopropanol
Persistence: Water/Soil: LOW (Half-life = 14 days)
Persistence: Air: LOW (Half-life = 3 days)

Ingredient: xylene
Persistence: Water/Soil: HIGH (Half-life = 360 days)
Persistence: Air: LOW (Half-life = 1.83 days)

Ingredient: methyl ethyl ketone
Persistence: Water/Soil: LOW (Half-life = 14 days)
Persistence: Air: LOW (Half-life = 26.75 days)

Ingredient: n-butanol
Persistence: Water/Soil: LOW (Half-life = 54 days)
Persistence: Air: LOW (Half-life = 3.65 days)

Ingredient: phosphoric acid
Persistence: Water/Soil: HIGH
Persistence: Air: HIGH

Ingredient: dimethyl ether
Persistence: Water/Soil: LOW
Persistence: Air: LOW

Mobility

Ingredient: toluene
Mobility: LOW (KOC = 268)

Ingredient: isopropanol
Mobility: HIGH (KOC = 1.06)

Ingredient: methyl ethyl ketone
Mobility: MEDIUM (KOC = 3.827)

Ingredient: n-butanol
Mobility: MEDIUM (KOC = 2.443)

Ingredient: phosphoric acid
Mobility: HIGH (KOC = 1)

Ingredient: dimethyl ether
Mobility: HIGH (KOC = 1.292)

Bioaccumulative Potential

Ingredient: toluene
Bioaccumulation: LOW (BCF = 90)

Ingredient: isopropanol
Bioaccumulation: LOW (LogKOW = 0.05)

Ingredient: xylene
Bioaccumulation: MEDIUM (BCF = 740)

Ingredient: methyl ethyl ketone
Bioaccumulation: LOW (LogKOW = 0.29)

Ingredient: n-butanol
Bioaccumulation: LOW (BCF = 0.64)

Ingredient: phosphoric acid
Bioaccumulation: LOW (LogKOW = -0.7699)

Ingredient: dimethyl ether
Bioaccumulation: LOW (LogKOW = 0.1)

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Product / Packaging disposal

Consult State Land Waste Management Authority for disposal.

Discharge contents of damaged aerosol cans at an approved site.

Allow small quantities to evaporate.

DO NOT incinerate or puncture aerosol cans.

14. TRANSPORT INFORMATION

U.N. Number

1950

UN proper shipping name

AEROSOLS

Transport hazard class(es)

2.1

IERG Number

49

Other Information

Labels Required

Marine Pollutant: NO

HAZCHEM: Not Applicable

Land transport (ADG)

UN number: 1950

UN proper shipping name: AEROSOLS

Transport hazard class(es):

Class: 2.1

Subrisk: Not Applicable

Packing group: Not Applicable

Environmental hazard: Not Applicable

Special precautions for user:

Special provisions: 63 190 277 327 344

Limited quantity: 1000ml

Air transport (ICAO-IATA / DGR)

UN number: 1950

UN proper shipping name: Aerosols, flammable; Aerosols, flammable (engine starting fluid)

Transport hazard class(es):

ICAO/IATA Class: 2.1

ICAO / IATA Subrisk: Not Applicable

ERG Code: 10L

Packing group: Not Applicable

Environmental hazard: Not Applicable

Special precautions for user:

Special provisions: A145A167A802; A1A145A167A802

Cargo Only Packing Instructions: 203

Cargo Only Maximum Qty / Pack: 150 kg

Passenger and Cargo Packing Instructions: 203; Forbidden

Passenger and Cargo Maximum Qty / Pack: 75 kg; Forbidden

Passenger and Cargo Limited Quantity Packing Instructions Y203; Forbidden

Passenger and Cargo Limited Maximum Qty / Pack: 30 kg G; Forbidden

Sea transport (IMDG-Code / GGVSee)

UN number: 1950

UN proper shipping name: AEROSOLS

Transport hazard class(es):

IMDG Class: 2.1

IMDG Subrisk: Not Applicable

Packing group: Not Applicable
Environmental hazard: Not Applicable
Special precautions for user:
EMS Number: F-D, S-U
Special provisions: 63 190 277 327 344 959
Limited Quantities: 1000ml

Transport in bulk according to Annex II of MARPOL and the IBC code
Not Applicable

15. REGULATORY INFORMATION

Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

TOLUENE(108-88-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

ISOPROPANOL(67-63-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

XYLENE(1330-20-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

METHYL ETHYL KETONE(78-93-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

N-BUTANOL(71-36-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

PHOSPHORIC ACID(7664-38-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

DIMETHYL ETHER(115-10-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft

National Inventory: Canada - NDSL

Status: Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) (toluene; n-butanol; xylene; dimethyl ether; phosphoric acid; isopropanol; methyl ethyl ketone)

National Inventory: China - IECSC

Status: All ingredients are on the inventory

National Inventory: Europe - EINEC / ELINCS / NLP
Status: All ingredients are on the inventory

National Inventory: Japan - ENCS
Status: All ingredients are on the inventory

National Inventory: Korea - KECI
Status: All ingredients are on the inventory

National Inventory: New Zealand - NZIoC
Status: All ingredients are on the inventory

Poisons Schedule

Not Scheduled

Australia (AICS)

All ingredients are on the inventory

Philippines (PICCS)

All ingredients are on the inventory

USA (TSCA)

All ingredients are on the inventory

16. OTHER INFORMATION

User Codes

User Title Label	User Codes
Task #	24325
Transcription Sign Off	24325 TC 19122017

Other Information

Version No: 2.1.1.1

Safety Data Sheet according to WHS and ADG requirements

Hazard Alert Code: 4

S.GHS.AUS.EN

Other means of identification: Not Available

Ingredients with multiple cas numbers

Name: phosphoric acid

CAS No: 7664-38-2, 16271-20-8

Name: dimethyl ether

CAS No: 115-10-6, 157621-61-9

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This SDS has been transcribed into Infosafe GHS format from an original, issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

END OF SDS

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