

# Acetone

Version 2.0 Revision Date: 04/07/2015

#### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

: Acetone **Product name** 

Product Use Descrip-: Intermediate, Solvent.

tion

Manufacturer or supplier's details

Company : Famis Inc.

**Address** 5689 NW 35th court

Miami FL, 33142

United States of America

**Emergency telephone number:** 

Transport North America: CHEMTREC 800.424.9300

#### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Flammable liquids : Category 2

Eye irritation : Category 2A

Specific target organ tox- : Category 3 (Central nervous system)

icity - single exposure

**GHS Label element** 

Hazard pictograms





Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks, open



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flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/

lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ eye protection/ face protection.

#### Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if vou feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

#### Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

# Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

#### **Potential Health Effects**

Carcinogenicity:

**IARC** No component of this product present at levels greater

than or equal to 0.1% is identified as probable, possible

or confirmed human carcinogen by IARC.

**ACGIH** No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by ACGIH.

**OSHA** No component of this product present at levels greater



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than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by OSHA.

**NTP** No component of this product present at levels greater

than or equal to 0.1% is identified as a known or antic-

ipated carcinogen by NTP.

# **Emergency Overview**

Appearance	liquid
Colour	clear, colourless
Odour	sweet, pungent
Hazard Summary	No information available.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Substance

# **Hazardous components**

CAS-No.	Chemical Name	Concentration (%)
67-64-1	Acetone	90 - 100

Molecular formula : C3H6O

# **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in atten-

dance.

Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure.

If unconscious place in recovery position and seek

medical advice.

In case of skin contact : If on skin, rinse well with water.

If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.



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If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious per-

son.

If symptoms persist, call a physician.

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing

media

: Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains

or water courses.

Hazardous combustion

products

: No hazardous combustion products are known

Specific extinguishing

methods

: Use a water spray to cool fully closed containers.

Further information : Collect contaminated fire extinguishing water sepa-

rately. This must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local requ-

lations.

For safety reasons in case of fire, cans should be

stored separately in closed containments.

Special protective equip-

ment for firefighters

: Wear self-contained breathing apparatus for firefight-

ing if necessary.

# NFPA Flammable and Combustible Liquids Classification:

Flammable Liquid Class IB

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Beware of vapours accumulating to form explosive



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Environmental precau-

tions

concentrations. Vapours can accumulate in low areas.

: Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains

inform respective authorities.

Methods and materials for containment and

cleaning up

: Contain spillage, and then collect with noncombustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regula-

tions (see section 13).

#### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling : Avoid formation of aerosol.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before

use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in

the application area.

Take precautionary measures against static dis-

charges.

Provide sufficient air exchange and/or exhaust in work

rooms.

Container may be opened only under exhaust ventila-

tion hood.

Open drum carefully as content may be under pres-

sure.

Dispose of rinse water in accordance with local and

national regulations.

Conditions for safe sto-

rage

: No smoking.

Keep container tightly closed in a dry and well-

ventilated place.

Containers which are opened must be carefully re-

sealed and kept upright to prevent leakage.

Observe label precautions.

Electrical installations / working materials must comp-

ly with the technological safety standards.

#### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

# Components with workplace control parameters



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CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
67-64-1	Acetone	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		TWA	250 ppm 590 mg/m3	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m3	OSHA Z-1
		TWA	750 ppm 1,800 mg/m3	OSHA P0
		STEL	1,000 ppm 2,400 mg/m3	OSHA P0

# **Biological occupational exposure limits**

		-				
Components	CAS-No.	Control parame- ters	Biological specimen		Permissi- ble con- centration	Basis
Acetone	67-64-1	Acetone	Urine	End of shift (As soon as possible after expo- sure ceases)		ACGIH BEI

# **Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally

required.

In the case of vapour formation use a respirator with

an approved filter.

Hand protection

Remarks : The suitability for a specific workplace should be dis-

cussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal

processing problems.

Skin and body protection : impervious clothing

Choose body protection according to the amount and

concentration of the dangerous substance at the work

place.

Hygiene measures : When using do not eat or drink.



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When using do not smoke.

Wash hands before breaks and at the end of workday.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** : liquid

Colour : clear, colourless

Odour : sweet, pungent

Odour Threshold : 62 ppm

: No data available рН : -94 °C (-137 °F)

Freezing Point (Melting

point/range)

Boiling Point (Boiling

point/boiling range)

: 56 °C (133 °F)

Flash point : -20 °C (-4 °F)

: 5.6 - 6.06 Evaporation rate

n-Butyl Acetate

Flammability (solid, gas) : No data available

: No data available Burning rate

Upper explosion limit : 13 %(V)

Lower explosion limit : 2.1 %(V)

Vapour pressure : 181 mmHg @ 20 °C (68 °F)

: 2 @ 20 °C (68 °F) Relative vapour density

(Air = 1.0)

Relative density : 0.792 @ 20 °C (68 °F)

Density : 0.792 g/cm3 @ 20 °C (68 °F)

Bulk density : No data available

Solubility(ies)

: completely soluble Water solubility



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Solubility in other sol-

vents

: No data available

Partition coefficient: n-

octanol/water

: log Pow: 0.2

Auto-ignition temperature : 540 °C

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : 0.32 mPa.s @ 25 °C (77 °F)

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No dangerous reaction known under conditions of

normal use.

Chemical stability

Possibility of hazardous

reactions

: Stable under normal conditions.

: No hazards to be specially mentioned.

Conditions to avoid : Keep away from heat, flame, sparks and other ignition

sources.

Incompatible materials : Bases

Oxidizing agents Reducing agents

# **SECTION 11. TOXICOLOGICAL INFORMATION**

# **Acute toxicity**

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

**Components:** 

67-64-1:

Acute oral toxicity : LD50 (rat): 5,800 mg/kg



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Acute inhalation toxicity : LC50 (rat): 76.0 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD50 : > 7,426 mg/kg

#### Skin corrosion/irritation

#### **Components:**

**67-64-1:** Species: rabbit Exposure time: 24 h Method:

In vivo

Result: Mild skin irritation

# Serious eye damage/eye irritation

#### **Components:**

67-64-1:

Species: rabbit

Result: Irritating to eyes. Exposure time: 24 h

# Respiratory or skin sensitisation

# **Components:**

67-64-1:

Test Type: Maximization test

Species: guinea pig

Result: Did not cause sensitisation on laboratory animals.

# Germ cell mutagenicity

# **Components:**

67-64-1:

Genotoxicity in vitro : Test Type: Mammalian cell gene mutation assay

Test species: Mouse lymphoma cells

Metabolic activation: Without metabolic activation

Method: OECD Test Guideline 476

Result: negative

: Test Type: Ames test

Metabolic activation: with and without metabolic acti-

vation

Method: OECD Test Guideline 471

Result: negative

: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO)

Metabolic activation: with and without metabolic acti-



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vation

Method: OECD Test Guideline 473

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Test species: mouse Application Route: Oral Exposure time: 13 wk

Dose: 5,000, 10,000, 20,000 ppm

Result: negative

Germ cell mutagenicity-

Assessment

: Tests on bacterial or mammalian cell cultures did not

show mutagenic effects.

# Carcinogenicity

#### **Components:**

67-64-1:

Species: mouse, (female)
Application Route: Dermal

Exposure time: 365 d (90%) or 424 d (100%) Dose: 0.1ml 90(71mg) or 100% (79mg) Frequency of Treatment: 3 times per wk

NOAEL: 79

Result: did not display carcinogenic properties

Carcinogenicity - As- : Carcinogenicity classification not possible from current

sessment data.

# Reproductive toxicity

# Components:

67-64-1:

Effects on fertility : Species: rat, male

Application Route: oral Dose: 0, 5000, 10000 mg/L

Frequency of Treatment: 7 days/week General Toxicity - Parent: LOAEL: 10,000

Fertility: 10,000

Effects on foetal devel-

opment

: Species: rat

Application Route: Inhalation Dose: 0,

440, 2200, 11000 ppm Frequency of

Treatment: 7 days/week

General Toxicity Maternal: NOAEC: 2,200 ppm

Teratogenicity: NOAEC: 11,000 ppm

Embryo-foetal toxicity.: NOAEC: 2,200 ppm

Method: OECD Test Guideline 414

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Result: No teratogenic potential.

GLP: No data available

Reproductive toxicity -

Assessment

: No evidence of adverse effects on sexual function and fertility, and on development, based on animal expe-

riments.

# STOT - single exposure

**Product:** No data available

# **Components:**

67-64-1:

<b>Exposure routes:</b>	<b>Target Organs:</b>	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	

# STOT - repeated exposure

**Product:** No data available

# Components:

67-64-1:No data available

# Repeated dose toxicity

# Components:

# 67-64-1:

Species: mouse, male

NOAEL: 20000

Application Route: Oral Exposure time: 13 wk Number of exposures: daily

Dose: 1250, 2500, 5000, 10000, 20000 Method: OECD Test Guideline 408

GLP: No data available

Species: mouse, female

NOAEL: 20000 LOAEL: 50000

Application Route: Oral Exposure time: 13 wk Number of exposures: daily

Dose: 2500, 5000, 10000, 20000, 5000



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Method: OECD Test Guideline 408

GLP: No data available

Repeated dose toxicity - : Causes mild skin irritation., Causes serious eye irrita-

Assessment tion.

# **Aspiration toxicity**

#### **Further information**

#### **Product:**

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

# **SECTION 12. ECOLOGICAL INFORMATION**

# **Ecotoxicity**

#### **Components:**

67-64-1:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 6,100

mg/l

Exposure time: 48 h

Toxicity to daphnia and

other aquatic inverte-

brates

: EC50 (Daphnia magna (Water flea)): 7,630 mg/l Exposure time: 48 h

Test substance: Acetone

Toxicity to algae : Remarks: No data available

# Persistence and degradability

# Components:

67-64-1:

Biodegradability : Remarks: Readily biodegradable

# Bioaccumulative potential

Components:

67-64-1:

Partition coefficient: n-

octanol/water

: log Pow: -0.24



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Mobility in soil

No data available

Other adverse effects

No data available

**Product:** 

Regulation 40 CFR Protection of Environment; Part 82 Protection

of Stratospheric Ozone - CAA Section 602 Class I Sub-

stances

Remarks This product neither contains, nor was manufactured

with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A

+ B).

Additional ecological in-

formation

: No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Dispose of in accordance with all applicable local,

state and federal regulations.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty

drum.

#### **SECTION 14. TRANSPORT INFORMATION**

**IATA (International Air Transport Association)**: UN1090, ACETONE, 3, II, Flash Point:-20 °C(-4 °F)

IMDG (International Maritime Dangerous Goods): UN1090, ACETONE, 3, II

**DOT (Department of Transportation):** UN1090, ACETONE, 3, II

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#### **SECTION 15. REGULATORY INFORMATION**

OSHA Hazards : Flammable liquid, Mild skin irritant, Moderate eye

irritant

WHMIS Classification : B2: Flammable liquid

D2B: Toxic Material Causing Other Toxic Effects

# **EPCRA - Emergency Planning and Community Right-to-Know Act**

# **CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Acetone	67-64-1	5000	5000

# **SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 : Fire Hazard

**Hazards** Acute Health Hazard

**SARA 302** : SARA 302: No chemicals in this material are subject

to the reporting requirements of SARA Title III,

Section 302.

SARA 313 : SARA 313: This material does not contain any chemi-

cal components with known CAS numbers that exceed

the threshold (De Minimis) reporting levels estab-

lished by SARA Title III, Section 313.

# **Clean Air Act**

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

67-56-1 Methanol 0.0061 % 71-43-2 Benzene 0.005 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

67-64-1 Acetone 100 % 67-56-1 Methanol 0.0061 % 71-43-2 Benzene 0.005 %

#### **Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

71-43-2 Benzene 0.005 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:



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71-43-2 Benzene 0.005 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

# **US State Regulations**

# **Massachusetts Right To Know**

67-64-1 Acetone 90 - 100 % 71-43-2 Benzene 0 - 0.1 %

Pennsylvania Right To Know

67-64-1 Acetone 90 - 100 %

**New Jersey Right To Know** 

67-64-1 Acetone 90 - 100 %

California Prop 65 WARNING! This product contains a chemical known to

the State of California to cause cancer.

71-43-2 Benzene

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

reproductive harm.

67-56-1 Methanol 71-43-2 Benzene

# The components of this product are reported in the following inventories:

United States TSCA Inventory	:	y (positive listing) (On TSCA Inventory)
Canadian Domestic Substances List (DSL)	:	y (positive listing) (All components of this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	y (positive listing) (On the inventory, or in compliance with the inventory)



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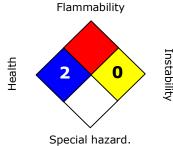
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Korea. Korean Existing Chemicals Inventory (KECI)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
China. Inventory of Existing Chemical Substances in China (IECSC)	•	y (positive listing) (On the inventory, or in compliance with the inventory)

# **SECTION 16. OTHER INFORMATION**

# **Further information**

# **NFPA:**



# **HMIS III:**

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

<sup>0 =</sup> not significant, 1 = Slight,

<sup>2 =</sup> Moderate, 3 = High 4 =Extreme, \* = Chronic



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The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

16075697, 16071303, 16070561, 16070557, 16069569, 16055833, 16055832, 16055831, 16055830, 16055829, 16062035, 16053090, 16050725, 16050368, 16049710, 16046507, 16045896, 16040423, 16038301, 16024443, 16024442, 16017790, 772814, 772813, 770579, 746703, 743460, 731755, 722683, 716725, 714790, 714016, 53967, 143817, 699233, 694280, 669662, 657544, 640730, 632517, 632516, 622972, 610607, 602401, 601081, 590044, 588482, 579567, 577332, 570345, 554132, 554043, 554368, 554299, 554204, 554084, 554042, 556643, 546857, 508583, 69081, 102957, 52701, 86730, 86576, 86729, 86575, 85459, 70349, 70195, 102439, 69676, 101837, 103107, 86726, 102776, 101843, 86578, 85462, 86731, 70348, 70194, 86057, 69078, 53968, 53814, 85456, 167020, 158363, 107921, 86736, 103057, 86399, 101847, 86676, 70017, 52704, 70353, 53820, 53637

Key or le	gend to abbreviations and acr	onyms used	I in the safety data sheet
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Sub- stances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Sub- stances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philipines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.



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TARESION 2.	<sup>0</sup> International Agency for Re-	TLV	Threshold single Value 04/07/2015
	search on Cancer		
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Compositon, Complex Reaction Products, and Biological Materials



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<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System	
LC50		Lethal Concentration 50%		