

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Mad Chemist Gun Wash
Manufacturer or supplier's details
Company : Mad Chemist
Address : 14271 Corporate Dr. Suite B
Garden Grove, CA, 92843
United States of America

Emergency telephone number:
Mad Chemist:-1-800-535-5053

Additional Information: : Responsible Party: Product Safety Group
Phone:
Regulatory Informaiton number: 714-265-3744
Fax:
Email:

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2

Eye irritation : Category 2A

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

Specific target organ toxicity - repeated exposure (Inhalation) : Category 2 (Auditory system, Eyes)

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.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

or repeated exposure if inhaled.

Precautionary statements : **Prevention:**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. - 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.
P260 Do not breathe 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.
P281 Use personal protective equipment as required.

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 you 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.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
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.

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

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 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 anticipated carcinogen by NTP.

Emergency Overview

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical Name	Concentration (%)
67-64-1	Acetone	90 - 100
108-88-3	Toluene	1 - 5
123-86-4	n-Butyl acetate	1 - 5

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure.
If unconscious place in recovery position and seek

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

medical advice.

SECTION 5. FIREFIGHTING MEASURES

- | | |
|---|--|
| Suitable extinguishing media | : Alcohol-resistant foam
Carbon dioxide (CO ₂)
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 | : Carbon oxides
Nitrogen oxides (NO _x) |
| Specific extinguishing methods | : Use a water spray to cool fully closed containers. |
| Further information | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments. |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus for fire-fighting 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 concentrations. Vapours can accumulate in low areas. |
| Environmental precautions | : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains |

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

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 discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Container may be opened only under exhaust ventilation hood.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
67-64-1	Acetone	TWA	500 ppm	ACGIH

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

		STEL	750 ppm	ACGIH
		TWA	250 ppm 590 mg/m ³	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m ³	OSHA Z-1
		TWA	750 ppm 1,800 mg/m ³	OSHA P0
		STEL	1,000 ppm 2,400 mg/m ³	OSHA P0
108-88-3	Toluene	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m ³	NIOSH REL
		ST	150 ppm 560 mg/m ³	NIOSH REL
		TWA	200 ppm	OSHA Z-2
		CEIL	300 ppm	OSHA Z-2
		Peak	500 ppm	OSHA Z-2
		TWA	100 ppm 375 mg/m ³	OSHA P0
		STEL	150 ppm 560 mg/m ³	OSHA P0
123-86-4	n-Butyl acetate	TWA	150 ppm	ACGIH
		STEL	200 ppm	ACGIH
		ST	200 ppm 950 mg/m ³	NIOSH REL
		TWA	150 ppm 710 mg/m ³	NIOSH REL
		TWA	150 ppm 710 mg/m ³	OSHA Z-1
		TWA	150 ppm 710 mg/m ³	OSHA P0
		STEL	200 ppm 950 mg/m ³	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Acetone	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	50 mg/l	ACGIH BEI
Toluene	108-88-3	Toluene	In blood	Prior to last	0.02 mg/l	ACGIH BEI

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

				shift of work-week		
		Toluene	Urine	End of shift (As soon as possible after exposure ceases)	0.03 mg/l	ACGIH BEI
		o-Cresol	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/g Creatinine	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 discussed 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.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

Appearance	: liquid
Colour	: clear, colourless
Odour	: No data available
Odour Threshold	: No data available
pH	: No data available
Freezing Point (Melting point/freezing point)	: < -70 °C (< -94 °F)
Boiling Point (Boiling point/boiling range)	: 56 - 125 °C (133 - 257 °F)
Flash point	: -20 °C (-4 °F)
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Burning rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 230.969 mmHg @ 25 °C (77 °F)
Relative vapour density	: No data available
Relative density	: 0.792 @ 20 °C (68 °F)
Density	: 0.793 g/cm ³ @ 20 °C (68 °F)
Bulk density	: No data available
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: 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 strong bases
Hazardous decomposition products	: Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), dense black smoke.

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

Acute inhalation toxicity : LC50 (Rat): 76.0 mg/l
Exposure time: 4 h

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

108-88-3:

Acute oral toxicity : LD50 (Rat, male): > 5,580 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): 28.1 mg/l

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

123-86-4:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 423
GLP: no

Acute inhalation toxicity : LC50 (Rat, male and female): > 21 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (Rabbit, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Skin corrosion/irritation

Product:

Result: No skin irritation

Components:

67-64-1:

Species: Rabbit
Exposure time: 24 h
Method: In vivo
Result: Mild skin irritation

108-88-3:

Species: Rabbit
Exposure time: 4 h
Result: Irritating to skin.

123-86-4:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: no

Serious eye damage/eye irritation

Product:

Result: Irritating to eyes.

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

Components:

67-64-1:

Species: Rabbit

Result: Irritating to eyes.

Exposure time: 24 h

108-88-3:

Species: Rabbit

Result: Irritating to eyes.

Method: OECD Test Guideline 405

123-86-4:

Species: Rabbit

Result: No eye irritation

GLP: yes

Respiratory or skin sensitisation

Components:

67-64-1:

Test Type: Maximization test

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

108-88-3:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

GLP: yes

123-86-4:

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 activation

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

	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 activation 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.
108-88-3: Genotoxicity in vitro	: Test Type: Mammalian cell gene mutation assay Test species: Mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative
Genotoxicity in vivo	: Test Type: Dominant lethal assay Test species: Mouse (male) Application Route: inhalation (vapour) Exposure time: 6 h/d, 5 d/wk for 8 wks Dose: 0, 100, 400 ppm Method: OECD Test Guideline 478 Result: negative
Germ cell mutagenicity-Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
123-86-4: Genotoxicity in vitro	: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster lung fibroblasts Metabolic activation: Without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: No data available
Genotoxicity in vivo	: Test Type: In vivo micronucleus test Test species: Mouse (male and female) Application Route: Oral

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

Dose: 500, 1000, 2000 mg/kg bw
Method: OECD Test Guideline 474
Result: negative
GLP: yes
Test substance: Information given is based on data obtained from similar substances.

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 - Assessment : Carcinogenicity classification not possible from current data.

108-88-3:

Species: Rat, (male and female)
Application Route: inhalation (vapour)
Exposure time: 103 wks
Dose: 0, 600, 1200 ppm
Frequency of Treatment: 6.5 h/d, 5 d/wk
NOAEL: No observed adverse effect level: 1,200 ppm

Method: OECD Test Guideline 453
Result: did not display carcinogenic properties
Symptoms: Erosion of nasal epithelium
GLP: yes

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

123-86-4:

Remarks: This information is not available.

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

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 development : 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
 Result: No teratogenic potential
 GLP: No data available

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

108-88-3:

Effects on fertility : Test Type: Two-generation study
 Species: Rat, male and female
 Application Route: Inhalation
 Dose: 0, 100, 500, 2000 ppm
 Frequency of Treatment: 7 days/week
 General Toxicity - Parent: NOAEC: 500 ppm
 General Toxicity F1: NOAEC: 500 ppm
 Fertility: NOAEC: 2,000 ppm
 Symptoms: Reduced maternal body weight gain Reduced offspring weight gain
 Method: OECD Test Guideline 416
 Result: Animal testing did not show any effects on fertility.
 GLP: yes

Test Type: Fertility
 Species: Rat, male and female
 Application Route: inhalation (vapour)
 Dose: 0, 600, 1200 ppm
 Frequency of Treatment: 7 days/week
 General Toxicity - Parent: NOAEC: 600 ppm
 Symptoms: Decreased sperm count
 Result: Animal testing did not show any effects on fertility.

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

- Effects on foetal development : Species: Rat
 Application Route: inhalation (vapour)
 Dose: 0, 250, 750, 1500, 3000 ppm
 Duration of Single Treatment: 10 d
 Frequency of Treatment: 6 hr/day
 General Toxicity Maternal: NOAEC: 750 ppm
 Developmental Toxicity: NOAEC: 750 ppm
 Symptoms: Maternal toxicity, Reduced body weight, Skeletal malformations
 GLP: yes
- Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
- 123-86-4:**
 Effects on fertility : Species: Rat, male and female
 Application Route: Inhalation
 Dose: 0, 750, 1500, 2000 ppm
 Duration of Single Treatment: 6 h
 Frequency of Treatment: 7 days/week
 General Toxicity - Parent: NOAEC: 750 ppm
 General Toxicity F1: NOAEC: 750 ppm
 Fertility: NOAEC: 2,000 ppm
 Early Embryonic Development: NOAEC: 750 ppm
 Symptoms: Effect on reproduction capacity
 Method: OECD Test Guideline 416
 GLP: yes
- Effects on foetal development : Species: Rat, male and female
 Application Route: vapour
 Dose: 500, 1500, 3000 ppm
 Duration of Single Treatment: 6 h
 Frequency of Treatment: 5 days/week
 GLP: yes
- Reproductive toxicity - Assessment : Fertility classification not possible from current data.
 Embryotoxicity classification not possible from current data.

STOT - single exposure

Product: No data available

Components:

67-64-1:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or	

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

		mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	
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108-88-3:

Exposure routes:	Target Organs:	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.	

123-86-4:

Exposure routes:	Target Organs:	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

108-88-3:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Auditory system, Eyes	May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified	

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

		as specific target organ toxicant, repeated exposure, category 2.	
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123-86-4: 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
 Method: OECD Test Guideline 408
 GLP: No data available

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

108-88-3:

Species: Rat, male and female
 NOAEL: 300
 Application Route: inhalation (vapour)
 Exposure time: 6, 12, or 18 mths
 Number of exposures: 6 h/d, 5 d/wk
 Dose: 0, 30, 100, 300 ppm
 Method: OECD Test Guideline 453

Repeated dose toxicity - Assessment : Causes skin irritation.

123-86-4:

Species: Rat, male and female
 NOAEL: 500

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

Application Route: inhalation (vapour)
Exposure time: 13 wk
Number of exposures: 6 h/d, 5d/wk
Dose: 500, 1500, 3000 ppm
GLP: yes
Symptoms: oral or nasal discharge

Aspiration toxicity

Product:

No aspiration toxicity classification

Components:

108-88-3:

May be fatal if swallowed and enters airways.

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

Toxicity to algae : Remarks: No data available

108-88-3:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5.5 mg/l
Exposure time: 96 h
Test Type: flow-through test

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

Toxicity to daphnia and other aquatic invertebrates	: EC50 (Ceriodaphnia dubia): 3.78 mg/l Exposure time: 48 h Test Type: Renewal
Toxicity to algae	: EC50 (Chlorella vulgaris (Fresh water algae)): 134 mg/l Exposure time: 3 h Test Type: static test
Toxicity to bacteria	: IC50 (Bacteria): 84 mg/l Exposure time: 24 h Test Type: Static
Ecotoxicology Assessment Acute aquatic toxicity	: Toxic to aquatic life.
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.
123-86-4:	
Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 18 mg/l Exposure time: 96 h Test Type: flow-through test Method: OECD Test Guideline 203 GLP: no
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 44 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	: EC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l End point: Growth rate Exposure time: 72 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC (Daphnia magna (Water flea)): 23 mg/l Exposure time: 21 d
Toxicity to bacteria	: EC 50 (Tetrahymena pyriformis (Ciliate)): 356 mg/l Exposure time: 40 h Test Type: Static
Ecotoxicology Assessment Acute aquatic toxicity	: Harmful to aquatic life.
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

Persistence and degradability

Components:

67-64-1:

Biodegradability : Remarks: Readily biodegradable

108-88-3:

Biodegradability : Inoculum: Sewage
Biodegradation: 100 %
Remarks: Readily biodegradable

123-86-4:

Biodegradability : Biodegradation: 83 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

Chemical Oxygen Demand (COD) : 0.00169 mg/g

BOD/COD : BOD/COD: 72 %

Theoretical Oxygen Demand (ThOD) : 0.0022 mg/g

Bioaccumulative potential

Components:

67-64-1:

Partition coefficient: n-octanol/water : log Pow: -0.24

108-88-3:

Partition coefficient: n-octanol/water : log Pow: 2.73

123-86-4:

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 15

Partition coefficient: n-octanol/water : log Pow: 1.82

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
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 information	: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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): UN1263, PAINT RELATED MATERIAL, 3, II, Flash Point:-20 °C(-4 °F)

IMDG (International Maritime Dangerous Goods): UN1263, PAINT RELATED MATERIAL, 3, II

DOT (Department of Transportation): UN1263, PAINT RELATED MATERIAL, 3, II

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Flammable liquid, Moderate eye irritant, Teratogen, Reproductive hazard, Specific target organ toxicity - single exposure, Specific target organ toxicity - repeated exposure

WHMIS Classification : B2: Flammable liquid
D2A: Very Toxic Material Causing Other Toxic Effects
D2B: Toxic Material Causing Other Toxic Effects

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

CERCLA Reportable Quantity

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

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

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards

: Fire Hazard
 Immediate (Acute) Health Hazard
 Chronic (Delayed) Health Hazard

SARA 302

: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

: The following components are subject to reporting levels established by SARA Title III, Section 313:

108-88-3	Toluene	1.7338 %
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Clean Air Act

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

108-88-3	Toluene	1.7338 %
100-41-4	Ethylbenzene	0.0346 %
71-43-2	Benzene	0.0065 %
67-56-1	Methanol	0.0059 %
98-82-8	Cumene	0.0866 PPM

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 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

67-64-1	Acetone	96.9318 %
108-88-3	Toluene	1.7338 %
123-86-4	n-Butyl acetate	1.3344 %
100-41-4	Ethylbenzene	0.0346 %
71-43-2	Benzene	0.0065 %
67-56-1	Methanol	0.0059 %
98-82-8	Cumene	0.0866 PPM

Clean Water Act

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

108-88-3	Toluene	1.7338 %
123-86-4	n-Butyl acetate	1.3344 %
100-41-4	Ethylbenzene	0.0346 %
71-43-2	Benzene	0.0065 %

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

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

108-88-3	Toluene	1.7338 %
123-86-4	n-Butyl acetate	1.3344 %
100-41-4	Ethylbenzene	0.0346 %
71-43-2	Benzene	0.0065 %

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

108-88-3	Toluene	1.7338 %
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US State Regulations

Massachusetts Right To Know

67-64-1	Acetone	90 - 100 %
108-88-3	Toluene	1 - 5 %
123-86-4	n-Butyl acetate	1 - 5 %
71-43-2	Benzene	0 - 0.1 %

Pennsylvania Right To Know

67-64-1	Acetone	90 - 100 %
108-88-3	Toluene	1 - 5 %
123-86-4	n-Butyl acetate	1 - 5 %
100-41-4	Ethylbenzene	0 - 0.1 %

New Jersey Right To Know

67-64-1	Acetone	90 - 100 %
108-88-3	Toluene	1 - 5 %
123-86-4	n-Butyl acetate	1 - 5 %

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

100-41-4	Ethylbenzene
71-43-2	Benzene
98-82-8	Cumene

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

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

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.)

Safety Data Sheet

Mad Chemist Gun Wash

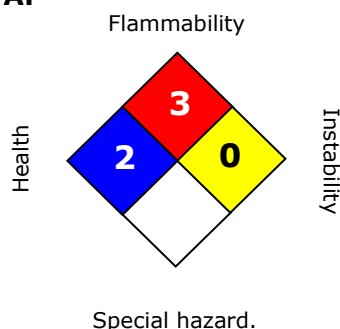
Version 1.0

Revision Date: 10/20/2015

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)
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

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

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.

Material number:

16099875, 16099874

Key or legend to abbreviations and acronyms used 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 Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances 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	Philippines 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.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
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 Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials In-

Safety Data Sheet

Mad Chemist Gun Wash

Version 1.0

Revision Date: 10/20/2015

			formation System
LC50			Lethal Concentration 50%
