SAFETY DATA SHEET



1. Identification

Product identifier Diuron Solution

Other means of identification

Item S-11827U1

Recommended use For Laboratory Use Only

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Chem Service, Inc.
Address 660 Tower Lane

West Chester, PA 19380

United States

Telephone Toll Free 800-452-9994

Direct 610-692-3026

Website www.chemservice.com
E-mail info@chemservice.com

Emergency phone number Chemtrec US 800-424-9300

Chemtrec outside US +1 703-527-3887

2. Hazard(s) identification

 Physical hazards
 Flammable liquids
 Category 2

 Health hazards
 Acute toxicity, oral
 Category 4

 Acute toxicity, inhalation
 Category 4

 Skin corrosion/irritation
 Category 2

 Serious ave damage/ove irritation
 Category 3A

Serious eye damage/eye irritation Category 2A Reproductive toxicity (the unborn child) Category 2

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated

exposure

Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment, Category 2

long-term hazard

OSHA defined hazards Not classified.

Label elements

Environmental hazards



Signal word Danger

Hazard statement Highly flammable liquid and vapor. Harmful if swallowed. Causes skin irritation. Causes serious

eye irritation. Harmful if inhaled. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. Toxic to

Category 2

aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Avoid release to the environment. Wear eye protection/face protection. Wear protective

gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell. If on skin (or hair): Take off Response

immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use

appropriate media to extinguish. Collect spillage.

Storage Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place.

Keep cool. Store locked up.

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

Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Toluene		108-88-3	99.99
Diuron		330-54-1	0.01

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation Skin contact

occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Ingestion

Get medical advice/attention if you feel unwell.

Most important

symptoms/effects, acute and

delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may

be used for small fires only.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods
General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials.

Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

		•					
US.	OSHA	Table	Z-2	(29	CFR	1910	.1000)

Components	Туре	Value	
Toluene (CAS 108-88-3)	Ceiling	300 ppm	
	TWA	200 ppm	
US. ACGIH Threshold Limit Valu	es		
Components	Туре	Value	
Diuron (CAS 330-54-1)	TWA	10 mg/m3	
Toluene (CAS 108-88-3)	TWA	20 ppm	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Туре	Value	
Diuron (CAS 330-54-1)	TWA	10 mg/m3	
Toluene (CAS 108-88-3)	STEL	560 mg/m3	
		150 ppm	
	TWA	375 mg/m3	
		100 ppm	

Biological limit values

ACGIH Biological Expos Components	Value	Determinant	Specimen	Sampling Time
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

^{* -} For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Toluene (CAS 108-88-3)

Can be absorbed through the skin.

Material name: Diuron Solution sps us

US - Minnesota Haz Subs: Skin designation applies

Toluene (CAS 108-88-3)

Skin designation applies.

Appropriate engineering

controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Liquid.

Color Not available.
Odor Not available.
Odor threshold Not available.
pH Not available.

Melting point/freezing point -138.82 °F (-94.9 °C) estimated Initial boiling point and boiling 231.08 °F (110.6 °C) estimated

range

Flash point 40.0 °F (4.4 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

r Not available.

(%)

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 37.86 hPa estimated

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 896 °F (480 °C) estimated

Decomposition temperatureNot available. **Viscosity**Not available.

Other information

Density 0.8635 g/cm3 estimated

Explosive properties Not explosive.

Flammability class Flammable IB estimated

Oxidizing properties

Percent volatile

Specific gravity

VOC (Weight %)

Not oxidizing.

99.99 % estimated

0.86 estimated

99.99 % estimated

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition No hazardous decomposition products are known.

products

11. Toxicological information

Information on likely routes of exposure

Inhalation Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by

inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Ingestion Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Headache. May cause drowsiness and dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May

cause redness and pain.

Information on toxicological effects

Acute toxicity Harmful if inhaled. Harmful if swallowed. Narcotic effects.

Acute toxicity	Hammar ir irinaica. Hammar ir Swanowca. Narcotic chects.			
Components	Species	Test Results		
Diuron (CAS 330-54-1)				
<u>Acute</u>				
Dermal				
LD50	Rat	> 2000 mg/kg, 24 Hours		
Inhalation				
Aerosol				
LC50	Rat	> 223 mg/m3, 4 Hours		
		> 5.05 mg/l, 4 Hours		
Oral				
LD50	Rat	> 2000 mg/kg		
Toluene (CAS 108-88-3)				
<u>Acute</u>				
Dermal				
LD50	Rabbit	> 5000 mg/kg		
		14.1 ml/kg		
Inhalation				
LC50	Mouse	6405 - 7436 ppm, 6 Hours		
		5320 ppm, 8 Hours		
		400 ppm, 24 Hours		
	Rat	26700 ppm, 1 Hours		
		12200 ppm, 2 Hours		
		[FF, - 1.00.0		

Components	Species	Test Results
		8000 ppm, 4 Hours
		5879 - 6281 ppm, 6 Hours
		12.5 - 28.8 mg/l, 4 Hours
Oral		
LD50	Rat	2.6 g/kg
Other		
LD50	Mouse	59 mg/kg
	Rat	1332 mg/kg

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

Causes serious eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Suspected of damaging the unborn child. **Specific target organ toxicity -** May cause drowsiness and dizziness.

single exposure

May cause damage to organs through prolonged or repeated exposure.

Specific target organ toxicity - repeated exposure

.

Aspiration hazard Not an aspiration hazard.

Chronic effects May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may

be harmful.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Diuron (CAS 330-54-1)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	1 - 1.9 mg/l, 48 hours
Fish	LC50	Cutthroat trout (Oncorhynchus clarki)	1.1 - 1.7 mg/l, 96 hours
Toluene (CAS 108-88-	-3)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Diuron 2.68 Toluene 2.73

Mobility in soil No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow **Disposal instructions**

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Dispose in accordance with all applicable regulations. Local disposal regulations

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN number UN1294

UN proper shipping name

Transport hazard class(es)

Toluene, solution (Toluene RQ = 1000 LBS)

3 **Class** Subsidiary risk 3 Label(s) Ш Packing group **Environmental hazards**

> Marine pollutant Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IB2, T4, TP1 Special provisions

150 Packaging exceptions 202 Packaging non bulk 242 Packaging bulk

IATA

UN number UN1294

Toluene solution (Toluene) **UN** proper shipping name

Transport hazard class(es)

Class 3 Subsidiary risk Packing group П Yes **Environmental hazards ERG Code** 3L

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo Allowed.

aircraft

Allowed. Cargo aircraft only

IMDG

UN number UN1294

UN proper shipping name **TOLUENE SOLUTION (Toluene)**

Transport hazard class(es)

Class 3 Subsidiary risk Packing group Ш **Environmental hazards**

Marine pollutant Yes F-E. S-D **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not established.

DOT



IATA; IMDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Diuron (CAS 330-54-1) Toluene (CAS 108-88-3) Listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

Material name: Diuron Solution sps us

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Toluene	108-88-3	99.99

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Toluene (CAS 108-88-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated. (SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Toluene (CAS 108-88-3) 65

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3) 594

US state regulations

US - New Jersey RTK - Substances: Listed substance

Diuron (CAS 330-54-1) Toluene (CAS 108-88-3)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

Toluene (CAS 108-88-3)

US. Massachusetts RTK - Substance List

Diuron (CAS 330-54-1) Toluene (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act

Diuron (CAS 330-54-1) Toluene (CAS 108-88-3)

US. Pennsylvania RTK - Hazardous Substances

Diuron (CAS 330-54-1) Toluene (CAS 108-88-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Diuron (CAS 330-54-1) Toluene (CAS 108-88-3)

US. Rhode Island RTK

Diuron (CAS 330-54-1) Toluene (CAS 108-88-3)

US. California Proposition 65

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

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Diuron (CAS 330-54-1) Listed: May 31, 2002

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Toluene (CAS 108-88-3) **US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**Toluene (CAS 108-88-3)

Listed: August 7, 2009

International Inventories

Country(s) or regionInventory nameOn inventory (yes/no)*AustraliaAustralian Inventory of Chemical Substances (AICS)YesCanadaDomestic Substances List (DSL)Yes

Material name: Diuron Solution
S-11827U1 Version #: 02 Revision date: 12-08-2016 Issue date: 09-30-2014

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes

EuropeEuropean List of Notified Chemical Substances (ELINCS)NoJapanInventory of Existing and New Chemical Substances (ENCS)YesKoreaExisting Chemicals List (ECL)YesNew ZealandNew Zealand InventoryYes

Philippines Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

Yes

16. Other information, including date of preparation or last revision

 Issue date
 09-30-2014

 Revision date
 12-08-2016

Version # 02

NFPA ratings Health: 2

Flammability: 3 Instability: 0

Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

This Safety Data Sheet (SDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an SDS for a solution or mixture the user should refer to the SDS for every component of the solution or mixture. Chem Service warrants that this SDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This SDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL.

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Revision InformationThis document has undergone significant changes and should be reviewed in its entirety.

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).