SAFETY DATA SHEET

CHEMSERVICE

1. Identification

Product identifier	Cinidon-ethyl		
Other means of identification			
Item	N-14414		
CAS number	142891-20-1		
Recommended use	For Laboratory Use Only		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/	Distributor information		
Manufacturer			
Company name Address	Chem Service, Inc. 660 Tower Lane West Chester, PA 19380 United States		
Telephone	Toll Free	800-452-9994	
	Direct	610-692-3026	
Website E-mail	www.chemservice.com		
Emergency phone number	info@chemservice.com Chemtrec US	800-424-9300	
Emergency phone number	Chemtrec outside US	+1 703-527-3887	7
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Sensitization, skin		Category 1
	Carcinogenicity		Category 2
Environmental hazards	Hazardous to the aquatic er hazard	nvironment, acute	Category 1
	Hazardous to the aquatic er long-term hazard	nvironment,	Category 1
OSHA defined hazards	Not classified.		
Label elements			
		¥2	
Signal word	Warning		
Hazard statement	May cause an allergic skin reaction. Suspected of causing cancer. Very toxic to aquatic life. Very 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. Avoid breathing mist or vapor. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.		
Response	If on skin: Wash with plenty of water. If exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Collect spillage.		

 Storage
 Store locked up.

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

 Hazard(s) not otherwise
 None known.

 classified (HNOC)
 None known.

100% of the mixture consists of component(s) of unknown acute oral toxicity. 100% of the mixture consists of component(s) of unknown acute dermal toxicity. 100% of the mixture consists of component(s) of unknown acute inhalation toxicity.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%	
Cinidon-ethyl		142891-20-1	100	
4. First-aid measures				
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.			
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.			
Eye contact	Rinse with water. Get medical attention if irrita	ation develops and persists.		
Ingestion	Rinse mouth. Get medical attention if symptor	ms occur.		
Most important symptoms/effects, acute and delayed	May cause an allergic skin reaction. Dermatitis. Rash.			
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation Symptoms may be delayed.			
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aw of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.			
5. Fire-fighting measures				
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carb	on dioxide (CO2).		
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.			
Specific hazards arising from the chemical	During fire, gases hazardous to health may be	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	Move containers from fire area if you can do so without risk.			
Specific methods	Use standard firefighting procedures and cons	sider the hazards of other involv	ed materials.	
General fire hazards	No unusual fire or explosion hazards noted.			
6. Accidental release meas	sures			
Personal precautions, protective equipment and emergency procedures	t and appropriate protective equipment and clothing during clean-up. Avoid breat		ng mist or vapor. Do protective clothing.	
Methods and materials for	Prevent product from entering drains.			
containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.			
	Small Spills: Wipe up with absorbent material remove residual contamination.	(e.g. cloth, fleece). Clean surfa	ce thoroughly to	
	Never return spills to original containers for re containers. For waste disposal, see section 13		overed, labeled	
Environmental precautions	Avoid release to the environment. Inform appr environmental releases. Prevent further leaka drains, water courses or onto the ground.			

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. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

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Occupational exposure limits	This substance has no PEL, TLV, or other recommended exposure limit.		
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Appropriate engineering controls	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. It exposure limits have not been established, maintain airborne levels to an acceptable level.		
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.		
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	Observe any medical surveillance requirements. 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. Contaminated work clothing should not be allowed out of the workplace.		

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Solid.
Color	Off-white
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	233.96 - 234.86 °F (112.2 - 112.7 °C)
Initial boiling point and boiling range	> 680 °F (> 360 °C)
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.01 mPa at 20 °C
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	0.06 mg/l at 20 °C

Partition coefficient (n-octanol/water)	Not available.		
Auto-ignition temperature	Not available.		
Decomposition temperature	Not available.		
Viscosity	Not available.		
Other information			
Density	1.398 g/cm³ at 20 °C		
Explosive properties	Not explosive.		
Molecular formula	C19H17Cl2NO4		
Molecular weight	394.25		
Oxidizing properties	Not oxidizing.		

10. Stability and reactivity

Reactivity	The 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 reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity	Not known.	
Product	Species	Test Results
Cinidon-ethyl (CAS 1428	91-20-1)	
Dermal		
LD50	Rat	> 2000 mg/kg
Inhalation		
LC50	Rat	> 5.3 mg/l, 4 hours
Oral		
LD50	Rat	> 2200 mg/kg

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

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.		
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.		
Respiratory or skin sensitization			
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	May cause an allergic skin reaction.		
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	Suspected of causing cancer.		

Not listed.	Evaluation of Carcinogenicity d Substances (29 CFR 1910.1001-1050)
US. National Toxicology Pro	ogram (NTP) Report on Carcinogens
Not listed.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
12. Ecological information	1

Ecotoxicity	cicity Very toxic to aquatic life with long lasting effects.		
Product	Species Test Results		
Cinidon-ethyl (CAS 14	2891-20-1)		
Aquatic			
Crustacea	LC50	Daphnia	52.1 mg/l
Fish	LC50	Rainbow Trout	> 24.8 mg/l, 96 hours

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

Persistence and degradability	
Bioaccumulative potential	No data available.
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

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow 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.
Local disposal regulations	Dispose in accordance with all applicable 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).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

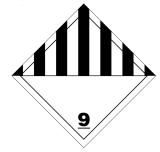
DOT

UN number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s. (Cinidon-ethyl)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	111
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	8, 146, 335, A112, B54, IB8, IP3, N20, T1, TP33
Packaging exceptions	155
Packaging non bulk	213
Packaging bulk	240

ΙΑΤΑ

IAIA	
UN number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Cinidon-ethyl)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	
Environmental hazards	No.
ERG Code	9L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
IMDG	
UN number	UN3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cinidon-ethyl)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-F
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and the IBC Code	

DOT; IATA; IMDG



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)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Hazard categories

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

Not regulated. Safe Drinking Water Act

(SDWA)

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material US state regulations is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

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

*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).

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

Issue date	03-11-2021
Revision date	03-12-2021
Version #	02
NFPA ratings	Health: 2 Flammability: 0 Instability: 0

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