CUSTOMER: 327598	ORDER #: 2358965
BATCH #: 1808149	DELIVERY ID: 13578577
PICK ZONE: AER2	PICK SEQUENCE #: 721
PRODUCT NAME: DYLEK II AEROSOL, MM	BARCODE #: 12053645

Safety Data Sheet DYLEK II AEROSOL, MM

Supercedes Date 07/09/2015 **Issuing Date** 01/07/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name DYLEK II AEROSOL, MM
Recommended use Cleaning agent
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 12053645
Chemical nature Halogenated hydrocarbon Fluorocarbons Mixture
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless **Physical state** liquid **Odor** Solvent-like

GHS Classification

Physical Hazards

Gases under pressure	Liquefied gas

Health Hazard

Aspiration Toxicity	Category 1
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Reproductive Toxicity	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Other hazards
None

Labeling
Signal Word
DANGER

Hazard statements
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H304 - May be fatal if swallowed and enters airways
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H280 - Contains gas under pressure; may explode if heated

Precautionary Statements
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, sparks, open flames or hot surfaces.
P251 - Pressurized container: Do not pierce or burn, even after use
P280 - Wear protective gloves, protective clothing and eye protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling
P260 - Do not breathe mist, vapors, or gas.
P271 - Use in a well-ventilated area.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs, get medical attention.
P362 - Take off contaminated clothing and wash before reuse
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 attention.
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a physician if unwell.
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
P410 - Protect from sunlight
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P501 - Dispose of contents and container in accordance with applicable local regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Weight % *
1,2-trans-Dichloroethylene	156-60-5	15-40
1,1,1,2-Tetrafluoroethane	811-97-2	15-40
2,3 - Dihydroperfluoropentane	138495-42-8	10-30
Hexane	110-54-3	7-13
Ethanol	64-17-5	7-13

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

General advice Avoid breathing vapors, mist, or gas. Avoid contact with skin, eyes and clothing.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.

Skin Contact Wash off immediately with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re -use.

Inhalation If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Ingestion Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth.

Notes to physician Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

5. FIRE-FIGHTING MEASURES

Flash Point No data available **Method** No data available

Flammability Limits in Air %: Mixture. **Upper:** 19 **Lower:** 1.1

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO2). Foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Vapors may form explosive mixture with air. Material can create slippery conditions. Flame extension: 0 inches / 0 cm and Burnback: 0 inch / 0 cm.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure -demand, NOHSC (approved or equivalent) and full protective gear.

Aerosol Level (NFPA 30B) - 3

NFPA	**Health 2**	**Flammability 1**	**Instability 1**
HMIS	**Health 2**	**Flammability 1**	**Instability 1**

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment Contain spillage, soak up with non -combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning Up Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.

Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing.

Storage Keep away from open flames, hot surfaces and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Store in original container.

Storage Temperature **Minimum** 35 °F / 2 °C **Maximum** 120 °F / 49 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
1,2-trans-Dichloroethylene	TWA: 200 ppm	TWA: 200 ppm TWA: 790 mg/m^3	TWA: 200 ppm TWA: 790 mg/m^3
Hexane	TWA: 50 ppm Skin	TWA: 500 ppm TWA: 1800 mg/m^3	1100 ppm TWA: 50 ppm TWA: 180 mg/m^3
Ethanol	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m^3	3300 ppm TWA: 1000 ppm TWA: 1900 mg/m^3

Engineering Measures Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin Protection Wear suitable protective clothing, impervious gloves.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re -use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid	**Viscosity**	Non viscous
Color	Colorless	**Odor**	Solvent-like
Odor Threshold	Not applicable	**Appearance**	Transparent
pH	Not applicable	**Specific Gravity**	1.25
Evaporation Rate	<1 (Butyl acetate=1)	**Percent Volatile (Volume)**	100
VOC Content (%)	45	**VOC Content (g/L)**	562.5
Vapor Pressure	261 mmHg @ 77°F	**Vapor Density**	3.7 (Air = 1.0)
Solubility	Insoluble	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition Temperature**	No data available
Boiling Point/Range	No data available	**Flammability (solid, gas)**	No data available
Flash Point	No data available	**Method**	No data available
Autoignition Temperature	No information available.		
Flammability Limits in Air %:	Mixture	**Upper: 19 Lower: 1.1**	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	Keep away from open flames, hot surfaces, and sources of ignition.
Incompatible Products	Strong oxidizing agents, Strong bases, Rubber products.
Decomposition Temperature	No data available
Hazardous Decomposition Products	Hydrogen halides, Carbon oxides.
Possibility of Hazardous Reactions	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Product Information No information available.

The following values are calculated based on chapter 3.1 of the GHS document

Dermal LD50 2,500.00

Inhalation LC50

Gas No information available

Mist No information available

Vapor 1,500.00

Principle Route of Exposure Inhalation, Skin contact, Eye contact.

Primary Routes of Entry Skin contact.

Acute Effects:

Eyes Causes eye irritation.

Skin Causes skin irritation.

Inhalation May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. May cause cardiac arrhythmia.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

Chronic Toxicity Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering. Kidney injury may occur.

Target Organ Effects Cardiovascular system, Central Nervous System, Respiratory system, Heart, Kidney, Liver, Eyes, Skin, Peripheral Nervous System (PNS), Auditory System.

Aggravated Medical Conditions Respiratory disorders, Heart disease, Kidney disorders, Neurological disorders, Skin disorders, Liver disorders.

Component Information

Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
1,2-trans-Dichloroethylene 156-60-5	= 1235 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	no data available	no data available	no data available
1,1,1,2-Tetrafluoroethane 811-97-2	no data available	no data available	= 1500 g/m^3 (Rat) 4 h	no data available	no data available
Hexane 110-54-3	= 15000 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	= 48000 ppm (Rat) 4 h	no data available	no data available
Ethanol 64-17-5	no data available	no data available	= 124.7 mg/L (Rat) 4 h	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
1,2-trans-Dichloroethylene 156-60-5	no data available	no data available	no data available	no data available	Central nervous system Eyes Respiratory system
Hexane 110-54-3	no data available	no data available	no data available	yes	Skin Central nervous system Eyes Respiratory system Peripheral Nervous System (PNS) Heart Auditory System
Ethanol 64-17-5	no data available	no data available	no data available	no data available	Blood Skin Central nervous system Eyes Respiratory system Reproductive System Liver

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA	Other
Ethanol 64-17-5	A3	Group 1	not applicable	X	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	log Pow
1,2-trans-Dichloroethylene	No information available.	LC50 = 135 mg/L Lepomis macrochirus 96 h	EC50 = 1142 mg/L 5 min EC50 = 1546 mg/L 30 min	No information available.	1.48
Hexane	No information available.	LC50 2.1 - 2.98 mg/L Pimephales promelas 96 h	No information available	No information available.	N/A
Ethanol	No information available.	LC50 12.0 - 16.0 mL/L Oncorhynchus mykiss 96 h LC50 > 100 mg/L Pimephales promelas 96 h LC50 13400 - 15100 mg/L Pimephales promelas 96 h	No information available	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static	-0.32

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of contents/container in accordance with local regulation.
Container Disposal Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT DOT
- **Proper Shipping Name** Consumer commodity
- **Hazard Class** ORM-D
- **Description** Consumer commodity,ORM-D

TDG
- **Proper shipping name** Aerosols
- **Hazard Class** 2.2
- **UN-No** UN1950

Description	AEROSOLS,2.2,UN1950, LTD QTY

ICAO

Shipping Description	DO NOT SHIP AIR

IATA

Shipping Description	DO NOT SHIP AIR

IMDG/IMO

Proper Shipping Name	Aerosols
Hazard Class	2.2
UN-No	UN1950
EmS No.	F-D, S-U
Description	UN1950, Aerosols,2.2, LTD QTY

15. REGULATORY INFORMATION

Inventories

TSCA	Complies
DSL	Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Component	CAS No.	Weight % *	SARA 313 - Threshold Values
1,2-trans-Dichloroethylene	156-60-5	15-40	1.0
Hexane	110-54-3	7-13	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	Yes	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
1,2-trans-Dichloroethylene	1000 lb 1 lb	Not applicable
Hexane	5000 lb	Not applicable

16. OTHER INFORMATION

Prepared By	Adrienne McKee
Supercedes Date	07/09/2015
Issuing Date	01/07/2016
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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