



DINO Solve

SECTION 1. IDENTIFICATION

Product Identifier	DINOSolve
Other Means of Identification	SLV-012
Other Identification	Polyurea dissolvant
Product Family	Polyurea dissolvant
Recommended Use	Used to clean out hardened polyurethane in spray equipment.
Restrictions on Use	Before soaking the spray gun in DINOSolve, remove all o-rings and rubber gaskets out of spray gun.
Manufacturer/Supplier	Cortez Industries Inc., 925 Mid-Way Blvd Unit 2, Mississauga, ON, L5T 1L9, Canada, Blair Duguid, 1-905-301-4152, www.cortezindustries.ca
Supplier Identifier	Cortez Industries Inc., 925 Mid-Way Blvd Unit 2, Mississauga, ON, L5T 1L9, Canada, Blair Duguid, 1-905-301-4152, www.cortezindustries.ca
Emergency Phone No.	Canutec, 1-613-996-6666 Blair Duguid, 1-905-301-4152
SDS No.	0055

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Flammable liquid - Category 4; Skin irritation - Category 2; Eye irritation - Category 2A; Reproductive toxicity - Category 1B; Specific target organ toxicity (single exposure) - Category 3

Label Elements



Danger

Hazard Statement(s):

H227	Combustible liquid.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H360	May damage fertility or the unborn child if inhaled and/or following skin contact.

Precautionary Statement(s):

Prevention:

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P202	Do not handle until all safety precautions have been read and understood.

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P264 Wash hands thoroughly after handling.

Precautionary Statement(s):

Response:

P312 Call a POISON CENTRE/doctor/ 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.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P302 + P352 IF ON SKIN: Wash with plenty of water/

And soap

P308 + P311 If exposed or concerned: Call a POISON CENTRE or doctor\physician.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

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

P362 + P364 Take off contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: Use water spray or fog, dry chemical powder, appropriate foam, carbon dioxide to extinguish.

Precautionary Statement(s):

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.

Precautionary Statement(s):

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

Use in a well ventilated room, vapour extraction should be close to the floor. May cause burns to eyes, skin and respiratory tract. Combustible liquid.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Dipropylene glycol monomethyl ether	34590-94-8	93 - 100	SLV-012	NMP, N-Methyl-2-pyrrolidinone, N-Methylpyrrolidone EG

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Immediately remove contaminated clothing. If danger of loss of consciousness, place patient in a recovery position and transport accordingly. Apply artificial respiration if necessary. First aid personnel should pay attention to their own safety. Keep the person warm and rested. Keep respiratory tract clear. In case of irregular breathing or respiratory arrest, practice artificial respiration. In case of unconsciousness, lie down in a stable lateral position and call a doctor. Do not leave the victim unattended.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Get medical advice or attention if you feel unwell.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention. Consult an ophthalmologist.

Ingestion

Rinse mouth and drink plenty of water. Induce vomiting. Never give anything to an unconscious person. If

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spontaneous vomiting occurs have the victim lean forward with head down to prevent aspiration of fluids into lungs. Get medical advice and attention immediately.

First-aid Comments

Note to physician: Treat according to symptoms (decontamination, vital functions) No known antidote. Pulmonary edema prophylaxis. Medical monitoring for at least 24 hours.

Most Important Symptoms and Effects, Acute and Delayed

The most important known symptoms and effects are described on the labelling, see section 2 and section 11 of the MSDS..

Immediate Medical Attention and Special Treatment

Target Organs

The most important known symptoms and effects are described on the labelling, refer to section 2 and 11 of the MSDS.

Special Instructions

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Medical Conditions Aggravated by Exposure

If medical attention is needed, have product container or label at hand.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Extinguishing media: Water spray, dry powder, foam, carbone dioxide.

Unsuitable Extinguishing Media

High volume water jet.

Specific Hazards Arising from the Product

Pressure is sealed containers may increase under the influence of heat and cause violent container rupture. Do not allow run-off from fire fighting to enter drains or water courses. Combustible liquid. Can ignite if heated. Releases vapour that can form explosive mixture with air at or above the flash point. See Section 9 (Physical and Chemical Properties) for flash point and explosive limits. May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, resulting in a fire and/or health hazard.

Carbone oxides, Nitrogen-containing compounds, hazardous organic compounds.

Special Protective Equipment and Precautions for Fire-fighters

Exercise caution when fighting any chemical fire. Under fire conditions hazardous fumes will be present. Use positive pressure self-contained breathing apparatus in addition to the standard fire fighting equipment. Use water spray to keep fire exposed containers cool.

Firefighter should be equipped with self-contained breathing apparatus and turn-out gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials. May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, if ventilation is not sufficient. Before entry, especially into confined areas, check atmosphere with an appropriate monitor. For additional precautions and advice on safe handling, see section 7. Never reintroduce the spilled product to its original container for reuse.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Notify local authorities if significant amount of product leaks and cannot be contained. In the event of pollution of a body of water or sewer, notify the competent authorities in accordance with local regulations.

Methods and Materials for Containment and Cleaning Up

Small spills or leaks: place the absorbant material on the liquid allowing it to absorb (30 minutes) and collect with none

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speak shovel in sealed labelled containers for disposal according to local regulaitons. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Compatable container with the product, then seal tightly and store in a safe cool and ventilated area until disposal. Large spills or leaks: dike spilled product to prevent runoff. Place the absorbant material on the liquid allowing it to absorb (30 minutes) and collect with none speak shovel in sealed labelled containers for disposal according to local regulaitons. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Compatable container with the product, then seal tightly and store in a safe cool and ventilated area until disposal. Review Section 13 (Disposal Considerations) of this safety data sheet. Contact emergency services and manufacturer/supplier for advice.

Other Information

Contact supplier, local fire and emergency services for help. Report spills to local health, safety and environmental authorities, as required.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protection equipment see section 8. Prevent electrostatic charge, sources of ignition should be kept well clear. Fire extinguishers should be kept handy. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Conditions for Safe Storage

Keep in properly labaled container. Respect label warnings. Close all opened containers securely and store vertically to prevent flow. Store in an area that is: cool, well-ventilated, out of direct sunlight and away from heat and ignition sources, out of direct sunlight and away from heat and ignition sources.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Dipropylene glycol monomethyl ether					10 ppm	

No occupational exposure limited information available.

Consult local authorities for provincial or state exposure limits. Good ventillation should be used.Ventilation rates should be matched to conditions.Use local exhaust ventilatiion or other engineering controls. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Proper grounding procedures to avoid static electricity build-up should be followed.

Appropriate Engineering Controls

Use adhequate general or local exhaust ventillation to keep airborne concentration below the permissible exposure limits. Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Use stringent control measures such as process enclosure to prevent product release into the workplace. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible. Ensure an eye shower and safety shower are located near the workstation.

Skin Protection

Hygiene measures in accordance wirth good hygiene and safety practice. Wash hands before breaks and at the end of workday. Glove suitability for the specific type of work and or exposure time should be evaluated by a protective glove supplier. Provide eyewash and safety showers.

The following materials should NOT be used: Resistance to breakthrough, less than 1 hour or poor degradation rating. Wear rubber or plastic apron and long sleeves shirts and pants. Remove contaminated clothing immediately and wash before reuse. Suitable materials are: Resistance to brakethrough longer than 8 hours Barrier® (PE/PA/PE), Tychem® Responder® CSM, Zytron® 300. Resistance to brakethrough longer than 8 hours neoprene rubber, nitrile rubber.

Respiratory Protection

Use only with adhequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls

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to keep gas vapour concentrations as low as possible below the TWA 8 hour exposure limits. Use explosive-proof ventilation equipment. Wear a NIOSH approved air-purifying respirator with an appropriate cartridge, wear a NIOSH approved air-purifying respirator with an organic vapour cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Colourless liquid. Particle Size: Not available
Odour	Amine-like
Odour Threshold	Not available
pH	7.7 - 8.0 (10% solution)
Melting Point/Freezing Point	Not available (melting); -24.2 °C (-11.6 °F) (freezing)
Initial Boiling Point/Range	202 °C (396 °F)
Flash Point	90.5 °C (194.9 °F) (closed cup)
Evaporation Rate	> 0.1 (n-butyl acetate = 1)
Flammability (solid, gas)	Flammable gas.
Upper/Lower Flammability or Explosive Limit	9.5% (upper); 1.3% (lower)
Vapour Pressure	0.293 mm Hg (0.039 kPa) at 20 °C
Vapour Density (air = 1)	3.42 (calculated)
Relative Density (water = 1)	1.029 at 25 °C
Solubility	Soluble in all proportions at 25 °C in water; Soluble in all proportions in ketones (e.g. acetone).
Partition Coefficient, n-Octanol/Water (Log Kow)	-0.38 at 25 °C
Auto-ignition Temperature	245 - 270 °C (473 - 518 °F)
Decomposition Temperature	Not available
Viscosity	1.75 mm ² /s at 25 °C (kinematic)
Other Information	
Physical State	Liquid
Molecular Formula	C5 N H9 O
Molecular Weight	99.14
Bulk Density	Not available
Surface Tension	Not available
Critical Temperature	Not available
Electrical Conductivity	1-2 X 10 ⁽⁶⁾ pS\m @ 25 C
Vapour Pressure at 50 deg C	Not available
Saturated Vapour Concentration	386 ppm at 20 °C

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Reacts in the presence of Forms no flammable gases in the presence of water. Exothermic reaction in the presence of strong acids and alkalis. Reacts with oxidizing agents.

Conditions to Avoid

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Open flames, sparks, static discharge, heat and other ignition sources. Thermal decomposition possible at temperatures above 365 C. It is not a self-decomposable substance. Temperatures above 365.0 °C (689.0 °F)

Incompatible Materials

Strong acids (e.g. hydrochloric acid), oxidizing agents (e.g. peroxides).
Not corrosive to metals.

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide. nitrogen oxides, other undetermined compounds.

SECTION 11. TOXICOLOGICAL INFORMATION

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye and skin contact. Route of entry for the volatiles and liquid are inhalation, eye and skin contact primary route of entry is skin contact for liquified gases.

Likely Routes of Exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye and skin contact. Routes of entry for liquid and vapours are: ingestion; inhalation; eye contact; skin contact. primary route of entry is skin for liquified gases.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Dipropylene glycol monomethyl ether	5.1 mg/L (rat) (4-hour exposure) (vapour)	4150 mg/kg (rat)	5000 mg/kg (rat)
Inhalation ATE mix = 5.1 mg/L (4-hour exposure) (vapour)			
0% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (inhalation)			
Oral ATE mix = 4150 mg/kg			
0% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (oral)			
Dermal ATE mix = 5000 mg/kg			
0% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (dermal)			

Skin Corrosion/Irritation

Animal tests show mild irritation.

Serious Eye Damage/Irritation

Animal tests show serious eye irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Causes temporary irritation of the respiratory tract.

Skin Absorption

Virtually nontoxic after single skin contact.

Ingestion

Of low toxicity after single ingestion.

Aspiration Hazard

No aspiration hazard expected.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

After repeated exposure, the prominent effect is local irritation. The substance may cause damage after repeated inhalation of high doses (15,000 ppm). Test conducted was inhalation by rats, 10 doses over two weeks.

Respiratory and/or Skin Sensitization

Not known to be a skin sensitizer. The product has not been tested. Skin sensitizing effects were not observed in animal studies. The statement has been derived from substances/products of a similar structure or composition. The main effect after repeated exposure is local irritation. The substance may cause damage after repeated inhalation of large doses (15,000 ppm). The test carried out by rats, 10 doses over two weeks.

Carcinogenicity

Not known to cause cancer.

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Reproductive Toxicity

Development of Offspring

The substance caused malformation\developmental toxicity in laboratory animals.

Sexual Function and Fertility

Assesment of reproductive toxicity as shown in animals studies, the product may cause damage to the testes after repeated exposures that cause other toxic effects.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

Assessment of genetic toxicity shown that the substance was not mutagenic in bacteria, no mutagenic effect was found in various tests with mammalian cell culture and mammals.

Interactive Effects

No information was located.

Other Information

No information found.

SECTION 12. ECOLOGICAL INFORMATION

There is a high probability that the product is not harmful to aquatic organisms.

Ecotoxicity

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Dipropylene glycol monomethyl ether	500 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour; fresh water; static)	1000 mg/L (Daphnia magna (water flea); 24 hours; fresh water; static)	500 mg/L (Scenedesmus subspicatus (Green algae); 72-hour; fresh water)	

Persistence and Degradability

Readily biodegradable.

73% biodegradable after 28 days as per test from OECD 301C

Bioaccumulative Potential

Because of the n-octanol\water distribution coefficient (log Pow), accumulation in organisms is not to be expected.

Mobility in Soil

The substance will rapidly evaporate into the atmosphere from the water surface. Adsorption to soil phase is not expected.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations. Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. Dispose of or recycle empty containers through an approved waste management facility. Do not expose containers to heat, flames, sparks, static electricity or other sources of ignition.

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SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Product is present in the U.S.TSCA.

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Not listed on the DSL or NDSL.

CEPA - National Pollutant Release Inventory (NPRI)

No information is available.

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 2** **Flammability - 2** **Instability - 0**

SDS Prepared By Cortez Industries

Phone No. 1-905-301-4152

Date of Preparation février 06, 2020

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Revision Indicators MSDS was entirely reviewed.

Key to Abbreviations ACGIH® = American Conference of Governmental Industrial Hygienists

IARC = International Agency for Research on Cancer

NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health

NTP = National Toxicology Program

OSHA = US Occupational Safety and Health Administration

Disclaimer Cortez Industries believes that the information contained in this Safety Data Sheet are accurate. The information was collected from the supplier's MSDS and the CHEMINFO database.

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