SAFETY DATA SHEET

1. Identification

Product identifier DEVCON® Aluminum Liquid (F-2) Resin

Other means of identification

0103 SKU#

Recommended use Not available. Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information **ITW Performance Polymers** Company name

Address 35 Brownridge Rd

Unit 1

Halton Hills, ON L7G 0C6

Customer Service Contact person 978-777-1100 Telephone number

Fax E-mail

Emergency telephone

800-424-9300

number

Not available. **Supplier**

2. Hazard identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A Sensitization, skin Category 1

Environmental hazards Not classified.

Label elements



Signal word Warning

Hazard statement Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

Precautionary statement

Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Prevention

Contaminated work clothing should not be allowed out of the workplace. Wear eye protection/face

protection. Wear protective gloves.

IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several Response

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Store away from incompatible materials. Storage

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

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

SDS CANADA

Chemical name	Common name and synonyms	CAS number	%
Aluminum Flake		7429-90-5	30 - 60
Epoxy Resin:reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)		25068-38-6	30 - 60
Calcium carbonate		1317-65-3	10 - 30
Alkyl Glycidyl Ether		68609-97-2	1 - 5
Other components below reportable le	evels		1 - <3

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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. Wash

contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. 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 Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). 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 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

Use water spray to cool unopened containers.

Specific methods
General fire hazards

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

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. 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

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 (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

US. ACGIH Threshold Limit Value Components	Туре	Value	Form
Aluminum Flake (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Canada. Alberta OELs (Occupatio Components	nal Health & Safety Code, Sche Type	dule 1, Table 2) Value	Form
Aluminum Flake (CAS	TWA	5 mg/m3	Pyrophoric powder.
7429-90-5)	IWA	10 mg/m3	Dust.
Calcium carbonate (CAS 1317-65-3)	TWA	10 mg/m3	Dust.
Canada. British Columbia OELs. (Safety Regulation 296/97, as amer		for Chemical Substances, Oc	cupational Health and
Components	Туре	Value	Form
Aluminum Flake (CAS 7429-90-5)	TWA	1 mg/m3	Respirable.
Calcium carbonate (CAS 1317-65-3)	STEL	20 mg/m3	Total dust.
,	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.
Canada. Manitoba OELs (Reg. 217	7/2006. The Workplace Safety A	nd Health Act)	
Components	Туре	Value	Form
Aluminum Flake (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Canada. Ontario OELs. (Control o	f Exposure to Biological or Che	emical Agents)	
Components	Туре	Value	Form
Aluminum Flake (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Canada. Quebec OELs. (Ministry o	of Labor - Regulation respecting	g occupational health and sa	fety)
Components	Туре	Value	Form
Aluminum Flake (CAS 7429-90-5)	TWA	5 mg/m3	Welding fume.
		10 mg/m3	
Calcium carbonate (CAS 1317-65-3)	TWA	10 mg/m3	Total dust.
Canada. Saskatchewan OELs (Oc Components	cupational Health and Safety R Type	egulations, 1996, Table 21) Value	Form
Aluminum Flake (CAS	15 minute	20 mg/m3	Dust.
7429-90-5)	13 minute	20 mg/m3	Dust.
		10 mg/m3	Pyrophoric powder.
	8 hour	5 mg/m3	Pyrophoric powder.
		10 mg/m3	Dust.
Calcium carbonate (CAS 1317-65-3)	15 minute	20 mg/m3	
Calcium carbonate (CAS 1317-65-3)	13 minute		

Appropriate engineering controls

Good general ventilation 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. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

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

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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

Paste. **Appearance** Physical state Solid. Paste. **Form** Colour Grey. Odour Slight.

Odour threshold Not available. pН Not available. Melting point/freezing point Not available.

Initial boiling point and boiling

320 °C (608 °F) estimated range

> 204.4 °C (> 399.9 °F) Flash point

Not available. **Evaporation rate** Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Not available. Explosive limit - lower (%) Explosive limit - upper

(%)

Not available.

Vapour pressure Not available. Not available. Vapour density Not available. Relative density

Solubility(ies)

Not available. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature** Not available. **Viscosity**

Other information

2.17 g/cm3 estimated **Density**

Explosive properties Not explosive. Oxidising properties Not oxidising.

Percent volatile 0.11 % estimated Specific gravity 2.17 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

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with

incompatible materials.

Incompatible materials Strong oxidising 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 Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction.

Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Not known.

Skin corrosion/irritation Causes skin irritation.

Serious eve damage/eve

Causes serious eye irritation.

irritation

Respiratory or skin sensitisation

Canada - Alberta OELs: Irritant

Aluminum Flake (CAS 7429-90-5) Irritant Calcium carbonate (CAS 1317-65-3) Irritant

Respiratory sensitisation Not a respiratory sensitizer.

Skin sensitisation 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

ACGIH Carcinogens

Aluminum Flake (CAS 7429-90-5) A4 Not classifiable as a human carcinogen.

Canada - Manitoba OELs: carcinogenicity

Aluminum Flake (CAS 7429-90-5) Not classifiable as a human carcinogen.

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

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

Bioaccumulative potential

No data is available on the degradability of any ingredients in the mixture.

Mobility in soil No data available.

Material name: DEVCON® Aluminum Liquid (F-2) Resin 0103 Version #: 01 Issue date: 29-May-2019

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 instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. 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.

Not applicable.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)

Aluminum Flake (CAS 7429-90-5)

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto Protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

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Country(s) or region Inventory name On inventory (yes/no)* Europe European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS) Europe No Japan Inventory of Existing and New Chemical Substances (ENCS) No Korea Existing Chemicals List (ECL) Yes New Zealand New Zealand Inventory Yes **Philippines** Philippine Inventory of Chemicals and Chemical Substances Yes (PICCS)

Taiwan Chemical Substance Inventory (TCSI) Yes
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

16. Other information

Issue date 29-May-2019

Version No. 01

Disclaimer

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

Material name: DEVCON® Aluminum Liquid (F-2) Resin 0103 Version #: 01 Issue date: 29-May-2019

^{*}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).

SAFETY DATA SHEET

1. Identification

Product identifier Aluminum Liquid (F-2) Hardener

Other means of identification

SKU# 5331

Recommended useNot available. **Recommended restrictions**None known.

Manufacturer/Importer/Supplier/Distributor information

Company name ITW Performance Polymers

Address 35 Brownridge Rd

Unit 1

Halton Hills, ON L7G 0C6

Contact personCustomer ServiceTelephone number978-777-1100

Fax E-mail

Emergency telephone

number

800-424-9300

Supplier Not available.

2. Hazard identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Acute toxicity, dermal

Skin corrosion/irritation

Serious eye damage/eye irritation

Category 1

Sensitization, skin

Category 1

Category 1

Environmental hazards Not classified.

Label elements



Signal word Danger

Hazard statement Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage.

May cause an allergic skin reaction. Causes serious eye damage.

Precautionary statement

Prevention Do not breathe mist/vapours. Wash thoroughly after handling. Do not eat, drink or smoke when

using this product. Contaminated work clothing should not be allowed out of the workplace. Wear

protective gloves/protective clothing/eye protection/face protection.

Response IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off

immediately all contaminated clothing. Rinse skin with water. 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. Immediately call a POISON CENTRE/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off

contaminated clothing and wash it before reuse.

Storage Store locked up.

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

Other hazards None known.

3. Composition/information on ingredients

Mixtures

Ingestion

Chemical name	Common name and synonyms	CAS number	%
Benzyl alcohol		100-51-6	10 - 30
TRIETHYLENETETRAMINE		112-24-3	10 - 30
Other components below reporta	ble levels		50

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Move to fresh air. Call a physician if symptoms develop or persist. Inhalation

Remove contaminated clothing immediately and wash skin with soap and water. Call a physician Skin contact

or poison control centre immediately. Chemical burns must be treated by a physician. 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. Call a physician or poison control centre immediately.

Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If

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

Most important

symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Provide general supportive measures and treat symptomatically. Chemical 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 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

Unsuitable extinguishing

media

Alcohol resistant foam. Powder. Carbon dioxide (CO2).

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

Specific hazards arising from the chemical

Special protective equipment

and precautions for firefighters

During fire, gases hazardous to health may be formed.

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

Fire fighting equipment/instructions

Specific methods General fire hazards Move containers from fire area if you can do so without risk.

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

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. 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 Use water spray to reduce vapours or divert vapour cloud drift. Prevent entry into waterways. sewer, basements or confined areas.

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 (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

Environmental precautions

7. Handling and storage

Precautions for safe handling

Do not breathe mist/vapours. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in tightly closed container. Store away from incompatible materials (see

Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components **Type** Value

TWA

TRIETHYLENETETRAMIN

E (CAS 112-24-3)

3 mg/m3

0.5 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Canada - Ontario OELs: Skin designation

TRIETHYLENETETRAMINE (CAS 112-24-3)

Can be absorbed through the skin.

Appropriate engineering

controls

Good general ventilation 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

Wear safety glasses with side shields (or goggles) and a face shield. Face shield is Eye/face protection

recommended.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

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

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

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. Contaminated work clothing

should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state Liquid. Liquid. **Form** Colour Amber. Amine-like. Odour Odour threshold Not available. Not available.

-15.2 °C (4.64 °F) estimated Melting point/freezing point Initial boiling point and boiling 216 °C (420.8 °F) estimated

range

93.3 °C (199.9 °F) estimated Flash point

Evaporation rate Not available. Not applicable. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%)

Explosive limit - upper

(%)

Not available. Not available.

5.73 hPa estimated Vapour pressure

Not available. Vapour density Not available. Relative density

Solubility(ies)

Not available. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

Auto-ignition temperature 337.78 °C (640 °F) estimated

Decomposition temperature Not available. **Viscosity** Not available.

Other information

0.97 g/cm3 estimated Density

Explosive properties Not explosive.

Combustible IIIB estimated Flammability class

Oxidising properties Not oxidising. 0.97 estimated Specific gravity VOC 100 % SOLIDS

10. Stability and reactivity

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

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerisation does not occur.

reactions

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid Conditions to avoid

temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Peroxides. Phenols.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction. Skin contact

Causes serious eye damage. **Eve contact**

Ingestion Causes digestive tract burns. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Harmful in contact with skin. Harmful if swallowed. Acute toxicity

Components **Species Test Results**

Benzyl alcohol (CAS 100-51-6)

Acute Dermal

LD50 Rabbit 2000 mg/kg

Inhalation

LC50 Rat 1000 mg/l, 8 Hours

Material name: Aluminum Liquid (F-2) Hardener 5331 Version #: 01 Issue date: 29-May-2019 Components Species Test Results

TRIETHYLENETETRAMINE (CAS 112-24-3)

Acute Dermal Liquid

LD50 Rat 1465 mg/kg

Oral *Liquid*

LD50 Rat 1716 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Respiratory sensitisation Not a respiratory sensitizer.

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not available.

Reproductive toxicityThis 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 hazardNot an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

No data is available on the degradability of any ingredients in the mixture.

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Benzyl alcohol 1.1

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation

potential.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. 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

TDG

UN number UN2735

UN proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S. (TRIETHYLENETETRAMINE, Aliphatic Amines), Limited

Quantity

Transport hazard class(es)

Class 8 Subsidiary risk Ш Packing group

Environmental hazards Not available.

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

IATA

UN number UN2735

Amines, liquid, corrosive, n.o.s. (TRIETHYLENETETRAMINE, Aliphatic Amines), Limited Quantity UN proper shipping name

Transport hazard class(es)

Class 8 Subsidiary risk Packing group Ш **Environmental hazards** No. **ERG Code** 8L

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

Other information

Passenger and cargo Allowed with restrictions.

aircraft

Allowed with restrictions. Cargo aircraft only

IMDG

UN2735 **UN number**

AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. UN proper shipping name

(TRIETHYLENETETRAMINE, Aliphatic Amines), Limited Quantity

Transport hazard class(es)

Class 8 Subsidiary risk Ш Packing group **Environmental hazards**

Marine pollutant No. F-A, S-B **EmS**

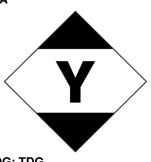
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Not established.

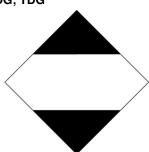
Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

IATA







General information

IMDG Regulated Marine Pollutant.

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto Protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

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

^{*}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

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Version No. 01

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product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

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