



SAFETY DATA SHEET

SDS 154/B

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1. Product and Company Identification

- 1.1 PRODUCT NAME:** CHEVALINE CLEARCURE 2K FG (Unit B)
- 1.2 USE OF PRODUCT** When mixed with the (Unit A), it produces a high performance, long life chemical and weather resistant clear finish for exterior or interior use.
- 1.3 SUPPLIER:** Equus Industries Ltd
Sheffield Street
Riverlands Industrial Estate
Blenheim, Marlborough, New Zealand
Telephone: +64 3 578 0214
Fax: +64 3 578 0919
Email: admin@equus.co.nz
- 1.4 EMERGENCY CONTACT:** **National Poison Centre**
Telephone: 0800 764 766

Information about Safety Data Sheet: Telephone: +64 3 578 0214 8:00am – 6:00pm Mon – Fri

- 1.5 DATE OF PREPARATION:** 15 October 2020

2. Hazards Identification

- 2.1 Statement of Hazardous Nature:**
Classified as hazardous according to New Zealand Hazardous Substances (Minimum degrees of hazard) Regulations 2017.
- 2.2 D.G Status:**
Classified as Dangerous Goods according to NZS 5433
- 2.3 Hazard Classification:**

GHS	HSNO EQUIVALENT	HAZARD STATEMENT
Flammable liquid Cat 3	3.1C	H226- Flammable liquid and vapour.
Acute Toxicity (inhalation) Cat 4	6.1D (Inhalation)	H332- Harmful if inhaled.
STOT SE Cat 3	6.1E (Inhalation)	H335- May cause respiratory irritation.
Aspiration Toxicity Cat 1	6.1E (Aspiration)	H304- May be fatal if swallowed and enters airways.
Skin Corrosion/Irritation Cat 2	6.3A	H315- Causes skin irritation
Serious Eye Damage/Irritation Cat 2	6.4A	H319- Causes serious eye irritation.
Skin Sensitisation Cat 1	6.5B	H317- May cause an allergic skin reaction.
STOT RE Cat 2	6.9B (Repeated Exposure)	H373- May cause damage to organs, through prolonged or repeated exposure
Chronic Aquatic Toxicity Cat 3	9.1C	H412- Harmful to aquatic life with long lasting effects.



2.4 Pictograms:



SIGNAL WORD: DANGER

2.5 Prevention Statements:

- P102 Keep out of reach of children.
- P103 Read label before use.
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

2.6 Response Statements:

- P303 + P361+ P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P370 + P378 In case of fire use water fog, carbon dioxide, dry chemical or foam for extinction
- P101 If medical advice is needed, have product container or label at hand.
- P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P331 Do NOT induce vomiting.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before re-use.
- 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 advice/attention.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P304 + P341 IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
- P363 Wash contaminated clothing before reuse.
- P314 Get medical advice/attention if you feel unwell.

2.7 Storage Statements:

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

**3. Composition/Information on Ingredients**

CAS NO.	COMPONENT	CONCENTRATION (% Weight)
28182-81-2	Hexamethylene-1,6-diisocyanate homo polymer	ca. 52
822-06-0	Hexamethylene-1,6-diisocyanate	ca.0.3
1330-20-7	Xylene isomers mixture	ca. 30
100-41-4	Ethylbenzene	ca. 6
108-65-6	2-Methoxy-1-Methylethyl acetate	ca. 12

4. First Aid Measures**4.1 After Inhalation:**

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If required, artificial respiration or administration of oxygen can be performed by trained personnel. If symptoms persist, seek medical attention.

4.2 After Skin Contact:

Remove/take off all contaminated clothing. Wash area of contact thoroughly with plenty of soap and water. If irritation, rash or other disorders develop, seek medical attention immediately. Wash contaminated clothing before re-use.

4.3 After Eye Contact:

Rinse cautiously with water for at least 15 minutes while holding eye lids apart. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists, seek medical advice/attention.

4.4 After Ingestion:

Immediately call Poison Centre or Doctor/Physician.
DO NOT induce the patient to vomit.

4.5 General:

Get immediate medical attention for any significant over exposure.

4.6 Advice to Doctor:

Treat symptomatically.

5. Fire Fighting Measures**5.1 Suitable Extinguishing Media:**

If water fog is ineffective, use carbon dioxide, dry chemical or foam.

5.2 Protective Equipment:

Use accepted firefighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water may be used to cool containers to minimise pressure build-up. DO NOT allow contaminated extinguishing water to enter the soil, storm water drains or sewers.

5.3 Specific Hazards:

Product may ignite if heated in excess of its flashpoint. Closed container may burst when exposed to extreme heat. Empty containers may contain ignitable vapours. Vapours may travel to sources of ignition and flash back.

5.4 Combustion Products:

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen, isocyanate vapours and traces of hydrogen cyanide.



5.5 Fire and Explosion Conditions:

Product may ignite if heated in excess of its flashpoint.
Vapours may travel to source of ignition and flashback.
Closed container may burst when exposed to extreme heat.
Empty containers may contain ignitable vapours.

5.6 Additional Information:

Flashpoint = 32°C (Closed Cup) Hazchem Code 3[Y].

6. Accidental Release Measures

6.1 Preliminary Action and Precautions:

- 6.1.1 Eliminate very possible source of ignition.
- 6.1.2 Evacuate all personnel immediately and ventilate area.
- 6.1.3 Avoid breathing vapour and contact with skin, eyes and clothing.
- 6.1.4 Wear recommended personal protective equipment.
- 6.1.5 Shut off leaks if possible, without risk.
- 6.1.6 Dike in the spilled product as much as possible with inert material.
- 6.1.7 Prevent entry of product into sewers, storm water drains and open bodies of water.
- 6.1.8 Clean up all spills as soon as possible, using an inert absorbed material and dispose of as hazardous waste.

7. Handling and Storage

7.1 Handling:

- 7.1.1 Prevent inhalation of vapour, ingestion and contact with skin, eyes and clothing.
- 7.1.2 Keep container closed when not in use. Precautions also apply to emptied containers.
- 7.1.3 Change soiled work clothing frequently.
- 7.1.4 Clean hands thoroughly after handling.
- 7.1.5 Do not smoke, weld, generate sparks, or use flame near container.
- 7.1.6 To prevent generation of static discharges, use bonding/grounding connection when pouring liquid.
- 7.1.7 Extinguish all ignition sources including pilot lights, and do not use non-explosion proof motors and electrical equipment until vapours dissipate.

7.2 Storage:

- 7.2.1 Store under dry warehouse conditions.
- 7.2.2 Store away from sources of ignition, (i.e. sparks, open flames, heat etc)
- 7.2.3 Store away from strong acids, strong bases, amines, water or moisture, and alcohols.
- 7.2.4 Keep containers tightly closed at all times.

**8. Exposure Controls and Personal Protection Equipment****8.1 Exposure Limits:**

CHEMICAL NAME	CAS NUMBER	REGULATION	LIMIT
Xylene isomers mixture	1330-20-7	WES/TWA	50ppm (217 mg/m ³)
Ethylbenzene	100-41-4	WES/TWA WES/STEL	100ppm (434 mg/m ³) 125ppm (543 mg/m ³)
Isocyanates all (as NCO)	-	WES/TWA WES/STEL	0.02ppm 0.07ppm

8.2 Exposure Controls:**8.2.1 Exposure Controls in the Work Place:**

Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

8.2.2 Personal Protection Equipment

Respiratory Protection – Wear appropriate, properly fitted NIOSH/MSHA, approved respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the SDS. Select positive pressure supplied air respirator for isocyanates, (TC 19c or equivalent).

Hand Protection – Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.

Eye Protection – Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.

Skin/Body Protection - Prevent contact with shoes and clothing.

Protective Measures - Use professional judgment in the selection, care, and use.

9. Physical and Chemical Properties**9.1 Information on basic physical and chemical properties:**

Appearance:	Liquid
Colour	Colourless
Odour	Solvent-like
Odour Threshold	not established
pH	not established
Boiling Point	ca. 140 °C
Flash Point	32°C (Closed cup)
Evaporation rate:	not established
Flammability (solid,gas)	not applicable
Burning number	not applicable
Vapour pressure	not established
Vapour pressure of ingredients	
Xylene isomers mixture	ca. 7-9hPa at 20°C
2-methoxy-1-methylethyl acetate	ca. 5hPa at 20°C
Hexamethylene-1,6-diisocyanate	ca. 0,007hPa at 20°C
Hexamethylene-1,6-diisocyanate	<0,0001hPa at 20°C
Homopolymer	(vapour pressure balance/OECD No.104)
Vapour Density	not established
Density	ca. 1.00g/cm ³ at 20°C



Miscibility with water	Immiscible at 15°C
Water solubility of ingredients	
2-methoxy-1-methylethyl acetate	ca.200 g/l at 20°C
Surface tension	not established
Partition coefficient (n-octanol/water)	not established
Auto ignition temperature	not applicable
Ignition temperature	not established
Decomposition temperature	not established
Viscosity, dynamic	not established
Explosive properties	not established
Dust explosion class	not applicable
Oxidising properties	not established

9.2 Other information:

The indicated values do not necessarily correspond to the product specification. Please refer to the technical information sheet for specification data.

10. Stability and Reaction

10.1 General Information:

This material is stable when properly handled and stored.

10.2 Conditions to Avoid:

High temperatures, open flames, sparks.

10.3 Material to Avoid:

Amines, water or moisture and alcohols.

10.4 Hazardous Reactions:

Exothermic reactions with amines and alcohols; reacts slowly with water forming CO₂, in closed containers risk of bursting owing to increase of pressure.

10.5 Hazardous Decomposition Products:

None expected when material properly handled and stored. For thermal decomposition Section 5.

10.5 Hazardous Polymerisation:

Will not occur under normal conditions.

11. Toxicological Information

11.1 Health Effects/Symptoms of Exposure:

Vapour and/or mist may irritate nose and throat. Leave area to breathe fresh air. Avoid further over exposure. If symptoms persist, seek medical attention.

11.2 Toxicological Data on Components:

Hexamethylene-1,6 diisocyanate homopolymers	CAS No. 28182-81-2
Oral LD50 Rat:	> 5000 mg/kg
Skin Rabbit:	Slight irritant
Hexamethylene-1,6 diisocyanate	CAS No. 822-06-0
Oral LD50 Rat:	746 mg/kg
Inhalation LC50 Rat:	0.124 mg/l, 4h
Skin Rabbit:	Severely irritant to corrosive



Xylene isomers mixture:	CAS No. 1330-20-7
Oral LD50 Rat:	3523-8700 mg/kg
Inhalation; LC50- Rat:	29.49 mg/l, 4h
Skin:	Irritating
Ethylbenzene	CAS No. 100-41-4
Oral LD50 Rats:	ca. 3500 mg/kg
Inhalation LC50 Rat:	9.6 mg/l
Skin:	Irritating
2-Methoxy-1-methylethyl acetate	CAS No. 108-65-6
Oral LD50 Rat:	8532 mg/kg
Inhalation LC50 Rat:	23.8 mg/l, 6h
Skin:	Rabbit Non` Irritating

11.3 Skin Contact:

May cause sensitization resulting in irritation, itching and redness.

11.4 Eye Contact:

Vapours and/or mist may cause eye irritation.

11.5 Ingestion:

May cause irritation to the mouth, throat and stomach. May cause gastrointestinal irritation, nausea and vomiting.

11.6 Inhalation:

May cause drowsiness, weakness, and fatigue. Vapour and/or mist may irritate nose and throat. May cause moderate irritation to the respiratory system. May cause allergic respiratory sensitization.

11.7 Chronic Effects:

Unless suitable engineering controls and/or personal protective equipment is used:

- Repeated over-exposure to vapour may lead to asthma and sensitization or damage to the respiratory system.
- Repeated unprotected physical contact with the material may cause defatting of the skin leaving it vulnerable to irritation, dermatitis and/or sensitization.
- Prolonged over exposure to vapour and/or unprotected physical contact may lead to internal organ sensitization and/or damage. The Central Nervous System may also be affected.

12. Ecological Information

12.1 Environment Protection:

Prevent from entering drains, sewers and waterways.

May cause long lasting harmful effects to aquatic life.

12.2 Ecotoxicity

Ecotoxicological Testing of Hexamethylene-1,6 diisocyanate homopolymer

Danio rerio (Zebra fish): LC50 (96 hr) > 100 mg/l
(OECD Guidelines for Testing of Chemicals, No. 203)

Daphnia magna (Water flea): EC50 (48 hr) > 100 mg/l
(OECD Guidelines for Testing of Chemicals, No. 202)



Scenedesmus subspicatus (Green algae): No toxic effect (72 hrs) at 100 g/l
(OECD Guidelines for Testing of Chemicals, No. 201)

For Xylene:

Oncorhynchus mykiss (Rainbow Trout):	EC50 (96 hr) 3.3 mg/l
Palaemonetes pugio (Daggerblade Grass Shrimp):	EC50 (72 hr) 8.5 mg/l
Skeletonema costatum (Algae):	EC50 (72 hr) 10.0 mg/l

For Ethyl Benzene:

Oncorhynchus mykiss (Rainbow Trout):	EC50 (96 hr) 4.2 mg/l
Daphnia magna (Water flea):	EC50 (48 hr) 2.1 mg/l
Selenastrum capricornutum (Algae):	EC50 (72 hr) 4.6 mg/l

For 2-methoxy-1-methylethyl acetate::

Oncorhynchus mykiss (Rainbow Trout):	LC50 (96 hr) 161 mg/l
Daphnia magna (Water flea):	EC50 (48 hr) > 500 mg/l

12.3 Persistence and Degradability:

Hexamethylene-1,6 diisocyanate homopolymer
Biodegradability: 1% (degradation rate 28 days) is not readily degradable.
(OECD Guidelines for Testing of Chemicals, No. 301 D)

Xylene: Expected to rapidly biodegrade.

Oxidizes rapidly by photo-chemical reactions to air.
Expected significant risk of oxygen depletion in aquatic systems.

2-Methoxy-1-methylethyl acetate
Expected to be inherently biodegradable.

12.4 Bioaccumulative Potential:

Hexamethylene-1,6 diisocyanate homopolymer
This substance can be classified as non-critical to aquatic organisms in the water-soluble range. As the compound is not readily biodegradable, long retention times in water are to be expected. This applies only in cases where no other elimination mechanisms (photodegradation, hydrolysis, absorption) are active. However, there is no toxic effect, no damage to the ecosystem is to be expected.

Xylene: Does not bioaccumulate significantly.

13. Disposal Consideration

13.1 Disposal Methods

Subject to hazardous waste treatment, storage and disposal requirements. Recycle or incinerate waste at approved facility or dispose of in compliance with national/regional/local, waste disposal regulations. DO NOT EMPTY INTO DRAINS, SEWERS OR WATERWAYS.

**14. Transport Information**

14.1 Classified as dangerous goods under NZS:5433:2007 Transport of Dangerous Goods on Land.

UN Number	1263
Proper Shipping Name	Paint Related
Class	3
Packing Group	III
Hazchem Code	3Y
Environmental Hazards:	No hazards identified

15. Regulatory Information**15.1 HSNO Approval:**

Approval Code	HSR 002662
HSNO Group Standard	Surface Coatings and Colourants (Flammable)

15.2 HSNO Controls:

Approved Handler	Not required
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16. Other Information**16.1 Abbreviations/Terminology:**

HSNO	Hazardous substances and New Organisms Act
CAS	Chemical Abstract Service
ACGIH	American Conference of Governmental Industrial Hygienists
LD50, LC50	Lethal dose/Lethal Concentration – Dose or concentration required to produce the specified effect in 50% of the sample studied.
WES	Workplace Exposure Standard (NZ Department of Business, Innovation and Employment)
TWA	Time weighted average exposure level designed to protect from the effects of long-term exposure.
STEL	Short-term Exposure Level (15 minutes)
VOC	Volatile Organic Compound

16.2 Issue Information:

Date of Preparation:	15 October 2020
Reasons:	GHS Version – New Product
Replaces:	N/A

16.3 The information contained in this Data Sheet relates only to the specific material identified. Equus Industries Ltd believes the information to be accurate and reliable as at the date of this Data Sheet. No Warranty, Guarantee or representation is expressed or implied by the Company as to the absolute correctness or completeness of any representation contained in this Data and assumes no legal responsibility in connection therewith. It can not be assumed that all acceptable safety measures are contained in this Data Sheet, or that additional measures may not be required under particular or exceptional circumstances or conditions.