

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name DA-CL-COLOR

Product Description 0.6255 g/L Mercury (II) thiocyanate; 30.3 g/L Iron (III) nitrate nonahydrate

Pure substance/mixture Mixture

Contains Methanol; Nitric acid; Mercury(II) thiocyanate

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company

Inorganic Ventures
300 Technology Drive
Christiansburg, VA 24073
web: www.inorganicventures.com

1.4. Emergency telephone number

Chemtrec 1-800-424-9300 (North America)

Chemtrec +1 703-741-5970 (International)

Europe	See above
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

*Classification according to
Regulation (EC) No. 1272/2008 [CLP]*

GHS

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 1 - (H370)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)

2.2. Label elements

Product identifier

Contains Methanol; Nitric acid; Mercury(II) thiocyanate

**Signal word**

Danger

Hazard statements

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H370 - Causes damage to organs

H373 - May cause damage to organs through prolonged or repeated exposure

EUH071 - Corrosive to the respiratory tract

Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust, fume, gas, mist, vapors and spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor

P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable

2.3. Other hazards

Other hazards

Harmful to aquatic life

No information available

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

Chemical name	EC No. (Index No.)	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Methanol	200-659-6 (603-001-00-X)	67-56-1	15	Flam. Liq. 2 (H225) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370)	No data available
Nitric acid	231-714-2 (007-004-00-1) (007-030-00-3) (078-012-00-0)	7697-37-2	0.05-1	(EUH071) Skin Corr. 1A (H314) Ox. Liq. 3 (H272) Acute Tox. 3 (H331)	No data available
Mercury(II) thiocyanate	209-773-0 (080-002-00-6) (080-004-00-7)	592-85-8	0.1	Acute Tox. 2 (H300) Acute Tox. 1 (H310) Acute Tox. 2 (H330) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available

Full text of H- and EUH-phrases: see section 16**SECTION 4: First aid measures****4.1. Description of first aid measures**

General Advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Inhalation	Immediate medical attention is required. Remove to fresh air. Artificial respiration and/or oxygen may be necessary. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Skin Contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. If symptoms persist, call a physician.
Ingestion	Immediate medical attention is required. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

4.2. Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	Difficulty in breathing.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing.

Advice for emergency responders

Ensure adequate ventilation.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure Limits**

Chemical name	European Union	United Kingdom	France	Spain	Germany DFG
Methanol 67-56-1	TWA: 200 ppm; TWA: 260 mg/m ³ ; pSk	TWA: 200 ppm; TWA: 266 mg/m ³ ; STEL: 250 ppm; STEL: 333 mg/m ³ ; pSk	TWA-VME (restrictif): 200 ppm; TWA-VME (restrictif): 260 mg/m ³ ; STEL-VLCT (restrictif): 1000 ppm; STEL-VLCT (restrictif): 1300 mg/m ³ ; dSk	TWA-(VLA-ED): 200 ppm; TWA-(VLA-ED): 266 mg/m ³ ; pSk	TWA-MAK: 100 ppm; II (2); TWA-MAK: 130 mg/m ³ ; II(2); Sk
Nitric acid 7697-37-2	STEL: 1 ppm; STEL: 2.6 mg/m ³ ;	STEL: 1 ppm; STEL: 2.6 mg/m ³ ;	STEL-VLCT (indicatif): 1 ppm; STEL-VLCT (indicatif): 2.6 mg/m ³ ;	STEL (VLA-EC): 1 ppm; STEL (VLA-EC): 2.6 mg/m ³ ;	
Mercury(II) thiocyanate 592-85-8	TWA: 0.02 mg/m ³ ;	TWA: 0.02 mg/m ³ ; TWA: 5 mg/m ³ ; STEL: 0.06 mg/m ³ ; STEL: 15 mg/m ³ ; pSk	TWA-VME: 0.02 mg/m ³ ; TWA-VME: 5 mg/m ³ ; dSk	TWA-(VLA-ED): 0.02 mg/m ³ ;	
Chemical name	Italy MDLPS	Portugal	Netherlands	Finland	Denmark
Methanol 67-56-1	TWA: 200 ppm; TWA: 260 mg/m ³ ; pSk	TWA (VLE-MP): 200 ppm; TWA (VLE-MP): 260 mg/m ³ ; STEL (VLE-CD): 250 ppm; pSk	TWA: 100 ppm; TWA: 133 mg/m ³ ; Sk	TWA: 200 ppm; TWA: 270 mg/m ³ ; STEL: 250 ppm; STEL: 330 mg/m ³ ; pSk	TWA: 200 ppm; TWA: 260 mg/m ³ ; STEL: 400 ppm; STEL: 520 mg/m ³ ; pSk
Nitric acid 7697-37-2	STEL: 1 ppm; STEL: 2.6 mg/m ³ ;	TWA (VLE-MP): 2 ppm; STEL (VLE-CD): 1 ppm; STEL (VLE-CD): 2.6	STEL: 0.5 ppm; STEL: 1.3 mg/m ³ ;	TWA: 0.5 ppm; TWA: 1.3 mg/m ³ ; STEL: 1 ppm; STEL: 2.6 mg/m ³ ;	STEL: 1 ppm; STEL: 2.6 mg/m ³ ;

Mercury(II) thiocyanate 592-85-8	TWA: 0.02 mg/m³; pSk	mg/m³; TWA (VLE-MP): 0.02 mg/m³; pSk	TWA: 0.9 ppm; TWA: 1 mg/m³; TWA: 0.02 mg/m³; STEL: 4.5 ppm; STEL: 5 mg/m³; Sk	TWA: 0.02 mg/m³; TWA: 1 mg/m³; STEL: 5 mg/m³; pSk	TWA: 0.02 mg/m³; including vapours TWA: 0.05 mg/m³; STEL: 0.04 mg/m³; including vapours STEL: 0.1 mg/m³; pSk	
Chemical name	Sweden	Austria	Switzerland	Poland	Norway	Ireland
Methanol 67-56-1		TWA-TMW: 200 ppm; TWA-TMW: 260 mg/m³; STEL-KZGW: 800 ppm (4 X 15 min); STEL-KZGW: 1040 mg/m³ (4 X 15 min); Sk	TWA-MAK: 200 ppm; TWA-MAK: 260 mg/m³; STEL-KZGW: 400 ppm; STEL-KZGW: 520 mg/m³; Sk	TWA-NDS: 100 mg/m³; STEL-NDSch: 300 mg/m³; Prohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel cells and biofuels Sk	TWA: 100 ppm; TWA: 130 mg/m³; STEL: 150 ppm (value calculated); STEL: 162.5 mg/m³ (value calculated); Sk	TWA: 200 ppm; TWA: 260 mg/m³; STEL: 600 ppm (calculated); STEL: 780 mg/m³ (calculated); pSk
Nitric acid 7697-37-2	LLV: 0.5 ppm LLV: 1.3 mg/m³ Binding STLV: 1 ppm Binding STLV: 2.6 mg/m³	TWA-TMW: 1 ppm; TWA-TMW: 2.6 mg/m³; STEL-KZGW: 1 ppm (); STEL-KZGW: 2.6 mg/m³ (); Ceiling: 1 ppm; Ceiling: 2.6 mg/m³;	TWA-MAK: 2 ppm; TWA-MAK: 5 mg/m³; STEL-KZGW: 2 ppm; STEL-KZGW: 5 mg/m³;	TWA-NDS: 1.4 mg/m³; STEL-NDSch: 2.6 mg/m³;	TWA: 2 ppm; TWA: 5 mg/m³; STEL: 4 ppm (value calculated); STEL: 10 mg/m³ (value calculated);	STEL: 1 ppm; STEL: 2.6 mg/m³;
Mercury(II) thiocyanate 592-85-8		TWA-TMW: 0.02 mg/m³; as long as dust forming, inhalable fraction TWA-TMW: 0.01 mg/m³; inhalable fraction STEL-KZGW: 0.08 mg/m³ (4 X 15 min); inhalable fraction, dust STEL-KZGW: 0.1 mg/m³ (1 X 30 min); inhalable fraction Sk DS	TWA-MAK: 0.02 mg/m³; aerosol, vapour TWA-MAK: 0.01 mg/m³; inhalable dust STEL-KZGW: 0.16 mg/m³; aerosol, vapour Sk S	TWA-NDS: 0.02 mg/m³; Sk	TWA: 0.02 mg/m³; TWA: 5 mg/m³; STEL: 0.03 mg/m³ (except Alkyl compounds;value from the regulation); STEL: 10 mg/m³ (value calculated); Sk As	TWA: 5 mg/m³; TWA: 0.02 mg/m³; STEL: 15 mg/m³ (calculated; except Hydrogen cyanide, Cyanogen and Cyanogen chloride); STEL: 0.06 mg/m³ (calculated);

Chemical name	European Union	United Kingdom	France	Spain	Germany TRGS
Methanol 67-56-1			- urine (Methanol) - end of shift	15 mg/L (urine - Methanol end of shift)	15 mg/L (urine - Methanol at the end of the shift, in case of long-term exposure after several previous shifts)
Mercury(II) thiocyanate 592-85-8			- blood (total Inorganic mercury) - end of shift at end of workweek - urine (total Inorganic mercury) - prior to shift		25 µg/g Creatinine (urine - Mercury no restriction in steady state)
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Methanol 67-56-1		30 mg/L (urine - Methanol end of shift, and after several shifts (for long-term exposures)) 936 µmol/L (urine - Methanol end of shift, and after several shifts (for long-term			15 mg/L (urine - Methanol end of shift)

		exposures))			
Mercury(II) thiocyanate 592-85-8	25 µg/g Creatinine - urine () - after end of work day, at the end of a work week/end of the shift				

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection

Wear safety glasses with side shields (or goggles).

Hand Protection

Impervious gloves.

Skin and Body Protection

Impervious clothing. Boots. Chemical resistant apron.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Environmental Exposure Controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Appearance

clear /ORANGE

Odor

Odorless

pH - VALUE 1

No data available

Melting point / melting range

No data available

Initial boiling point and boiling range

100 °C / 212.0 °F

Vapor pressure @20 °C (kPa)

No data available

Relative vapor density

No data available

Relative Density

No data available

Specific gravity - VALUE 1

No data available

Water solubility

Miscible

Partition coefficient: n-octanol/water

No data available

Autoignition temperature

No data available

Decomposition temperature

No data available

Dynamic viscosity - VALUE 1

No data available

Explosive properties

No information available

Oxidizing Properties

No information available

VOC content

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions**Hazardous polymerization**

Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Reducing agent

10.6. Hazardous decomposition products

Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Product Information	Harmful if swallowed. Harmful by inhalation. Harmful in contact with skin.
Inhalation	Harmful by inhalation.
Eye Contact	No data available.
Skin Contact	Harmful in contact with skin. May be absorbed through the skin in harmful amounts.
Ingestion	Harmful if swallowed.

The following ATE values have been calculated for the mixture

ATEmix (oral)	653.10 mg/kg
ATEmix (dermal)	1,428.60 mg/kg
ATEmix (inhalation-gas)	99,999.00
ATEmix (inhalation-dust/mist)	2.9471 mg/l
ATEmix (inhalation-vapor)	135.70 mg/l
Unknown acute toxicity	
19.03 % of the mixture consists of ingredient(s) of unknown acute toxicity.	
1 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.	
4.03 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.	
3.03 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).	

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Sensitization	No information available.
Mutagenic Effects	No information available.
Carcinogenic effects	
Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

SECTION 12: Ecological information

12.1. Toxicity

Chemical name	Algae/aquatic plants	Fish	Crustacea
Methanol		LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss)	

		LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus)	
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12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical name	Partition coefficient
Methanol	-0.77
Nitric acid	-2.3

12.4. Mobility in soil**Mobility in soil**

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Methanol	Not PBT/vPvB
Nitric acid	Not PBT/vPvB

12.6. Other adverse effects

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Mercury(II) thiocyanate	Group III Chemical		

SECTION 13: Disposal considerations

13.1. Waste treatment methods**Waste from Residues/Unused Products**

Dispose of in accordance with federal, state and local regulations.

Contaminated Packaging

Do not reuse empty containers.

Other information

Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG

14.1. UN-No	UN3286
14.2. Proper shipping name	Flammable liquid, toxic, corrosive, n.o.s
14.3. Transport hazard class(es)	3 (6.1, 8)
14.4. Packing Group	II
Description	Not applicable
14.5. Marine Pollutant	None
14.6. Special Provisions	None
No information available in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Transport No information available

RID

14.1. UN-No	UN3286
14.2. Proper shipping name	Flammable liquid, toxic, corrosive, n.o.s
14.3. Transport hazard class(es)	3 (6.1, 8)
14.4. Packing Group	II
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

ADR

14.1. UN-No	UN3286
14.2. Proper shipping name	Flammable liquid, toxic, corrosive, n.o.s
14.3. Transport hazard class(es)	3 (6.1, 8)
14.4. Packing Group	II
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

ICAO

14.1. UN-No	UN3286
14.2. Proper Shipping Name	Flammable liquid, toxic, corrosive, n.o.s
14.3. Hazard Class	3 (6.1, 8)
14.4. Packing Group	II
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

IATA-DGR

14.1. UN-No	UN3286
14.2. Proper shipping name	Flammable liquid, toxic, corrosive, n.o.s
14.3. Transport hazard class(es)	3 (6.1, 8)
14.4. Packing Group	II
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Occupational illnesses (R-463-3, France)

Germany

TA Luft (German Air Pollution Control Regulation)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

All of the components in the product are on the following inventory lists: U.S.A. (TSCA), Europe (EINECS/ELINCS/NLP), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), China (IECSC), Australia (AICS), Korea (ECL).

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AiIC	Complies
KECL	Complies

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical safety assessment

No information available

SECTION 16: Other information**Full text of R-phrases referred to under sections 2 and 3**

No information available

Full text of any hazard and/or precautionary statements referred to under Sections 2-15

EUH071 - Corrosive to the respiratory tract

H225 - Highly flammable liquid and vapor

H272 - May intensify fire; oxidizer

H300 - Fatal if swallowed

H301 - Toxic if swallowed

H310 - Fatal in contact with skin

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H330 - Fatal if inhaled

H331 - Toxic if inhaled

H370 - Causes damage to organs

H373 - May cause damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Revision date 01-Apr-2026

Reason for Revision Not applicable.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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.

End of Safety Data Sheet