Kanesho Soil Treatment SPRL/BVBA

SAFETY DATA SHEET

NEMATRAP®

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	1,3-DICHLOROPROPENE
Alternative names	1,3-dichloropropylene
Chemical Name	1,3-dichloropropene
Chemical Formula	$C_3H_4Cl_2$
CAS No.	542-75-6
EC No.	208-826-5
REACH Registration No.	Exempt.(Plant protection products)

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

Identified Use(s)	Plant Protection product, nematicide, emulsion concentrate.
Uses Advised Against	Not known.

1.3 Details of the supplier of the safety data sheet

Company Identification	Kanesho Soil Treatment SPRL/BVBA
Address of Supplier	avenue de Tervueren 270 Brussels
Postal code	1150
Telephone:	+32 (0)2 763 40 59
Fax	+32 (0)2 763 40 47
E-mail	info@kaneshost.be

1.4 Emergency telephone number

Emergency Phone No.	+44(0)1235 239 670
Contact	CareChem

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP)	Acute Tox. 3 :Toxic if swallowed. Acute Tox. 3 :Toxic if inhaled. Acute Tox. 3 :Toxic in contact with skin. Aquatic Acute 1 :Very toxic to aquatic life. Aquatic Chronic 1 :Very toxic to aquatic life with long lasting effects. Asp. Tox. 1 :May be fatal if swallowed and enters airways. Eye Irrit. 2 :Causes serious eye irritation. Flam. Liq. 3 :Flammable liquid and vapour. Skin Irrit. 2 :Causes skin irritation.

Skin Sens. 1 :May cause an allergic skin reaction.
STOT SE 3 :May cause respiratory irritation.

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name: 1,3-DICHLOROPROPENE

Hazard Pictogram(s)


GHS02


GHS06


GHS08


GHS09

Signal Word(s): Danger

Hazard Statement(s)

H226: Flammable liquid and vapour.
H301: Toxic if swallowed.
H304: May be fatal if swallowed and enters airways.
H311: Toxic in contact with skin.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H331: Toxic if inhaled.
H335: May cause respiratory irritation.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P273: Avoid release in the environment.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331: Do NOT induce vomiting.
P370+P378: In case of fire: Use water spray, foam, dry powder or CO2 to extinguish.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P309 + P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Additional label requirements: None.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name :	1,3-dichloropropene
Synonyms :	1,3-dichloropropylene
Formula:	C3H4Cl2

3.1.1. Concentration

		Concentration	
1,3-Dichloropropene cis+trans % m/m	**(1110 g/l)**	>= 90 %	content 94%
Co-formulants			content 6%

Emulsion Concentrate

CAS-No.: 542-75-6 / EC-No.: 208-826-5 / Index-No.: 602-030-00-5

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. Obtain immediate medical attention.
Skin Contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Obtain immediate medical attention.
Ingestion	Rinse mouth. Do not induce vomiting. TRANSFER TO HOSPITAL IMMEDIATELY.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation : Irritation of the respiratory tract. Coughing. Liver and kidney injuries, Lung oedema, Chemical pneumonitis, Causes damage to the central nervous system.

Skin Contact : Irritation, Redness, Swelling, Burns, Dermatitis, Repeated exposure may cause skin dryness and cracking.

Eye Contact : Redness, May cause excessive watering of the eye (lachrymation). Risk of temporary eye lesions.

Ingestion : Irritation, Causes nausea/vomiting. Abdominal pain, Diarrhoea, Risk of convulsions, loss of consciousness, deep coma and cardiopulmonary arrest. Risk of chemical pneumonitis and pulmonary (o)edema resulting from aspiration during vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine). Medical examination necessary even only on suspicion of intoxication. Risk of blood, liver, kidney and nervous system effects. Obtain immediate medical attention.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media	Use water spray, foam, dry powder or CO2 to extinguish.
Unsuitable extinguishing media	Water jet spray

5.2 Special hazards arising from the substance or mixture

May form explosive vapour/air mixtures. The vapour is heavier than air and spreads along ground. Risk of ignition, Decomposes in a fire giving off toxic fumes: Hydrogen chloride gas, Phosgene, Carbon monoxide

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions. This product should be kept away from naked flames and other sources of ignition . Water spray should be used to cool containers.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Ensure full personal protection (including respiratory protection) during removal of spillages. Stop leak if safe to do so. Eliminate sources of ignition. Cover the spreading liquid with foam in order to slow down the evaporation.

6.2 Environmental precautions

Avoid release to the environment. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Collect spillage. Adsorb spillages onto sand, earth or any suitable adsorbent material. Contain spillages with sand, earth or any suitable adsorbent material. Earth may be shoveled to contain spillage and to avoid contamination of sewers and watercourses.

6.4 Reference to other sections

See Also Section 8, 13.

6.5 Additional Information

None.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing vapours. Use only outdoors or in a well-ventilated area. Purge piping circuits and equipment with nitrogen. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed. Keep under inert gas

Appropriate packaging : Stainless steel, Steel drum

Storage temperature	Ambient.
Storage life	Stable under normal conditions.
Incompatible materials	Oxidizing agents, Polyethylene, PVC, Light metals, Powdered metal salts

7.3 Specific end use(s)

Contact supplier for further information.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits	No Occupational Exposure Limit assigned.
8.1.2 PNECs and DNELs	Not established.

8.2 Exposure controls

8.2.1. Appropriate engineering controls: Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment



Eye Protection: Wear eye protection with side protection (EN166). Goggles giving complete protection to eyes.



Skin protection: Wear protective clothing and gloves: Impervious gloves (EN 374). Suitable Materials: Fluoroelastomer .



Respiratory protection	Wear suitable respiratory protective equipment. Gas filtering respirator (DIN EN 14387). For high (or unknown) concentrations suitable respiratory equipment with positive air supply must be worn.
Thermal hazards	Not applicable.
8.2.3. Environmental Exposure Controls	Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
	Colour : Colourless.
Odour	Chloroform.
Odour threshold	Not known.
pH	Not applicable.
Melting point/freezing point	< -25°C
Initial boiling point and boiling range	103.8-114.5°C
Flash Point	27°C [Closed cup]
Evaporation rate	Not known.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	5.30-14.50 %(V)
Vapour pressure	48.50 hPa @ 25 °C (cis-isomer)
	29.82 hPa @ 25 °C (trans-isomer)
Vapour density	3.8
Density (g/ml)	1.22 g/cm³ @ 20 °C
Relative density	1.22 @ 20 °C
Solubility(ies)	Solubility (Water) : 2.5 g/l @ 20 °C
	Solubility (Other) : Soluble in: Common organic solvents, grease
Partition coefficient: n-octanol/water	Log Pow : 1.82-2.1 @ 20°C
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Dynamic viscosity : 0.78 mPa•s
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information

Henry Constant	101-170 Pa•m³/mol @ 20 °C
	Air , very volatile
Molecular weight	110.97 g/mol

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

May decompose on long exposure to light.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Strong oxidizers, alkali metals and alkaline earth metals may cause fires or explosions.

10.4 Conditions to avoid

Avoid friction, sparks, or other means of ignition. Heat and direct sunlight.

10.5 Incompatible materials

Oxidizing agents, Polyethylene, PVC, Light metals, Powdered metal salts

10.6 Hazardous decomposition products

Thermal decomposition will evolve: Hydrogen chloride gas, Phosgene, Carbon monoxide

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Toxic if swallowed.
	LD50 (rat) : 110 mg/kg
Acute toxicity - Skin Contact	Toxic in contact with skin.
	LD50 (rabbit) : 333 mg/kg
Acute toxicity - Inhalation	Toxic if inhaled.
	LC50 (4 hour) (rat) : 2.7 mg/l
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Skin sensitization data	May cause an allergic skin reaction.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
	Oral (Target Organs: Liver)
	NOAEL (rat) (male)(2 Year(s)): 2.5 mg/kg
	No significant tumour
	Oral
	NOAEL (rat) (female): 25 mg/kg
	Highest dose tested no observed effect
	Oral (Target Organs: Bladder)
	NOAEL (mouse)(male/female): 10 mg/kg
	Benign tumours were observed at a high level of exposure

	Inhalation (Target Organs: Lungs)
	NOAEC (mouse)(male): 20 ppm
	Benign tumours were observed at a high level of exposure
Reproductive toxicity	Not classified.
	Toxicity to reproduction/Fertility (Inhalation)
	NOAEL (rat) (male/female): 90 ppm
	Developmental toxicity/Teratogenicity (Inhalation)
	NOAEL (rat) (female): 90 ppm
Lactation	Not classified.
STOT - single exposure	May cause respiratory irritation.
STOT - repeated exposure	Not classified.
	Oral (Target Organs: Liver , Stomach)
	NOAEL (rat) (male/female)(2 Year(s)): 2.5 mg/kg
	Inhalation (Target Organs: Nose)
	NOAEC (rat) (male/female)(2 Year(s)): 20 ppm
	Oral (Target Organs: Bladder)
	NOAEL (mouse)(male/female)(18 Month(s)): 10 mg/kg
	Inhalation (Target Organs: Nose)
	NOAEC (mouse)(male/female)(2 Year(s)): 5 ppm
Aspiration hazard	May be fatal if swallowed and enters airways.

11.2 Other information

Not known.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

	Very toxic to aquatic life with long lasting effects.
Toxicity - Aquatic invertebrates	Daphnia magna (Water flea)
	EC50 (48 hour): 3.58 mg/l
Toxicity - Fish	Acute
	Oncorhynchus mykiss (Rainbow trout)
	LC50 (96 hour): 2.78 mg/l
	Cyprinodon variegatus (Sheepshead minnow)
	LC50 (96 hour) : 0.87 mg/l
	Chronic
	Pimephales promelas (Fathead minnow)
	NOEC (33 days): 0.032 mg/l

Toxicity - Algae	Selenastrum capricornutum (Green algae) ErC50 (72 hour) : 13.6 mg/l Skeletonema costatum (Marine diatom) ErC50 (72 hour) : 13.4 mg/l
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and Degradation

Abiotic Degradation
Photodegradation
Indirect photo-oxidation, Air, Non-significant photolysis
Sensitizer : OH, Half-life indirect photolysis: 7-12 h
Sensitizer : OH/O3 radicals, Half-life indirect photolysis: 12-52 days

Biodegradation
Biodegradability
Inherent biodegradability study - aerobic from 55 - 85 % - 7 days
Inoculum: adapted culture, chemical degradation

Anaerobic
Method: methanogenesis
Inherently biodegradable, dehalogenation

Aerobic
Method: ready biodegradability/MITI
Not readily biodegradable.

12.3 Bioaccumulative potential

Bioconcentration factor (BCF) : 0.86

12.4 Mobility in soil

Soil, Sediment
Log Koc : ca. 2
Significant evaporation and percolation

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6 Other adverse effects

Not known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Refer to manufacturer/supplier for information on recovery/recycling. The organic ingredients can be incinerated in a suitable installation when in accordance with local regulations. Recover and reclaim or recycle, if practicable.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No.	2047

14.2 UN proper shipping name

UN proper shipping name	DICHLOROPROPENES

14.3 Transport hazard class(es)

ADR/RID Class	3
IMDG Class	3
IMDG EMS	Not available
ICAO/IATA	
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y344
Passenger and Cargo Aircraft Limited Quantities Max net Qty	10L
Passenger and Cargo Aircraft Packing Instructions	355
Passenger and Cargo Aircraft Max net Qty	60L
Cargo Aircraft Packing Instructions	366
Cargo Aircraft Max net Qty	220L
Special Provisions	A3
Emergency Response Guidebook (ERG) Code	3L
ADR Classification Code	F1
ADR HIN	30
ADR Transport Category	3
Tunnel Restriction Code	D/E
Emergency Action Code	2Y
APP Advice on Additional Personal Protection (APP)	Not applicable

14.4 Packing group

Packing group	III
Labels	3



Special Provisions	Not applicable

Excepted Quantities	E1
Mixed Packing Instructions for Packages	P001 IBC03 LP01 R001
Special Packing Provisions for Packages	Not applicable
Mixed Packing Instructions for Packages	MP19

14.5 Environmental hazards

Environmental hazards	Classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user	Not known.

14.7 **Transport in bulk according to Annex II of Marpol and the IBC**

Code Product Name	1,3-DICHLOROPROPENE
Ship Type	2
Pollution Category	X
Packing Instructions for Portable Tanks	T2
Special Provisions for Portable Tanks	TP1
Tank Code for Tanks	LGBF
Special Provisions for Tanks	Not applicable
Vehicle for Tank Carriage	FL
Special Provisions for Carriage - Packages	V12
Special Provisions for Carriage - Bulk	Not applicable
Special Provisions for Carriage - Loading, Unloading and Handling	Not applicable
Special Provisions for Carriage - Operation	S2

15. SECTION 15: REGULATORY INFORMATION

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation	Not listed
REACH: ANNEX XIV list of substances subject to authorisation	Not listed
REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Not listed
Community Rolling Action Plan (CoRAP)	Not listed
Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants	Not listed
Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer	Not listed
Regulation (EU) N° 649/2012 of the	1,3-dichloropropene (542-75-6)

European Parliament and of the Council concerning the export and import of hazardous chemicals	
National regulations	
Other	Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

15.3 Inventory Status

Listed in: Mexico (INSQ), United States (TSCA), New Zealand Inventory (NZIoC), Canada (DSL/NDSL), Australia (AICS), Japan (ENCS), South Korea (KECI), China (IECSC), Philippines (PICCS), European Union (EINECS/ELINCS), Taiwan (NECI), Switzerland .

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16

LEGEND

Hazard Pictogram(s)


GHS02


GHS06


GHS08


GHS09

Hazard Statement(s)

H226: Flammable liquid and vapour.
H301: Toxic if swallowed.
H304: May be fatal if swallowed and enters airways.
H311: Toxic in contact with skin.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H331: Toxic if inhaled.
H335: May cause respiratory irritation.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting/equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.

P261: Avoid breathing vapours.
P264: Wash hands and exposed skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
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.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302+P352: IF ON SKIN: Wash with plenty of water.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P311: Call a POISON CENTER/doctor.
P312: Call a POISON CENTER/doctor if you feel unwell.
P321: Specific treatment (see on this label).
P330: Rinse mouth.
P331: Do NOT induce vomiting.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P361+P364: Take off immediately all contaminated clothing. And wash it before reuse.
P362+P364: Take off contaminated clothing and wash it before reuse.
P370+P378: In case of fire: Use to extinguish.
P391: Collect spillage.
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.
P501: Dispose of this material and its container as hazardous waste.

Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS : Chemical Abstracts Service
CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL : Derived No Effect Level
EC : European Community
EINECS : European Inventory of Existing Commercial Chemical Substances
IATA : International Air Transport Association

IBC : Intermediate Bulk Container
ICAO : International Civil Aviation Organization
IMDG : International Maritime Dangerous Goods
LTEL : Long term exposure limit
PBT : Persistent, Bioaccumulative and Toxic
PNEC : Predicted No Effect Concentration
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
RID : Regulations concerning the International Carriage of Dangerous Goods by Rail
STEL : Short term exposure limit
STOT : Specific Target Organ Toxicity
UN : United Nations
vPvB : very Persistent and very Bioaccumulative

Disclaimers

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