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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: 2,4-Dichlorophenoxyacetic acid, 98% Product Code: D 1585 CAS No : 94-75-7

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email info@ottokemi.com

1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Acute toxicity, (Category 4) H302: Harmful if swallowed. Serious eye damage, (Category H318: Causes serious eye damage. 1) Skin sensitization, (Category 1) H317: May cause an allergic skin reaction. Specific target organ toxicity -H335: May cause respiratory irritation. single exposure, (Category 3), Respiratory system H400: Very toxic to aquatic life. Short-term (acute) aquatic hazard, (Category 1) H412: Harmful to aquatic life with long Long-term (chronic) aquatic hazard, (Category 3) lasting effects. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Danger Hazard Statements H302 Harmful if swallowed. H317 May cause an allergic skin reaction. Causes serious eye damage. H318 H335 May cause respiratory irritation. Very toxic to aquatic life with long lasting effects. H410 Precautionary Statements P261 Avoid breathing dust. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Supplemental Hazard none Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Danger Hazard Statements

May cause an allergic skin reaction.

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H317

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H318	Causes serious eye damage.			
Precautionary Statements				
P261	Avoid breathing dust.			
P280	Wear protective gloves/ eye protection/ face protection.			
P302 + P352	IF ON SKIN: Wash with plenty of water.			
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.			
	Remove contact lenses, if present and easy to do. Continue			
	rinsing.			
Supplemental Hazard	none			
Statements				
2.3 Other hazards				
This substance/mixture contains no components considered to be either persistent,				
bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at				
levels of 0.1% or higher.				
Ecological information:				
The substance/mixture does not contain components considered to have endocrine				
disrupting properties according to REACH Article 57(f) or Commission Delegated regulation				
(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.				
Toxicological information:				
The substance/mixture does not contain components considered to have endocrine				
disrupting properties according to REACH Article 57(f) or Commission Delegated regulation				
(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.				
SECTION 3: Composition/information on ingredients				
3.1 Substances				
Synonyms : 2,4-D				
Formula : C8H6Cl2O3				
Molecular weight : 221,04 g/mol				
(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. SECTION 3: Composition/information on ingredients 3.1 Substances Synonyms : 2,4-D Formula : C8H6Cl2O3				

202-001-1		
Component	Classification	Concentration
2,4-dichlorophenoxyacetic acid; 2,4-D		
(ISO)		
CAS-No. 94-75-7	Acute Tox. 4; Eye Dam. 1; Skin Sens. 1;	<= 100 %
EC-No. 202-361-1	STOT SE 3; Aquatic Acute 1; Aquatic	
	Chronic 3; H302, H318, H317, H335,	
	H400, H412 M-Factor - Aquatic Acute: 10	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

CAS-No.

: 94-75-7

· 202-361 1

4.1 Description of first-aid measures General advice Show this material safety data sheet to the doctor in attendance. If inhaled After inhalation: fresh air. In case of skin contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician. In case of eye contact After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses. If swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 4.3 Indication of any immediate medical attention and special treatment needed No data available

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SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media Water Foam Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Carbon oxides Hydrogen chloride gas Combustible. Development of hazardous combustion gases or vapours possible in the event of fire. 5.3 Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. 5.4 Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. **SECTION 6: Accidental release measures** 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts. 6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Tightly closed. Dry. Light sensitive. Storage class Storage class (TRGS 510): 11: Combustible Solids 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other

substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

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Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L Body Protection protective clothing Respiratory protection Recommended Filter type: Filter A-(P2) The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties a) Physical state b) Color c) Odor d) Melting point/freezing point e) Initial boiling point and boiling range f) Flammability (solid, gas) g) Upper/lower flammability or explosive limits h) Flash point i) Autoignition temperature j) Decomposition temperature k) pH I) Viscosity m) Water solubility

n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information No data available powder light brown No data available Melting point/range: 136 - 140 °C - lit.

138 °C at 0,533 hPa

No data available

No data available

Not applicable No data available

No data available

No data available Viscosity, kinematic: No data available Viscosity, dynamic: No data available insoluble No data available

No data available 1,42 g/cm3 at 25 °C No data available No data available

No data available

No data available none

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SECTION 10: Stability and reactivity

10.1 Reactivity The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed. 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature). 10.3 Possibility of hazardous reactions Violent reactions possible with: Strong oxidizing agents bases various metals Copper iron/iron-containing compounds 10.4 Conditions to avoid no information available 10.5 Incompatible materials No data available 10.6 Hazardous decomposition products In the event of fire: see section 5 **SECTION 11: Toxicological information** 11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available. **SECTION 12: Ecological information** 12.1 Toxicity Toxicity to fish LC50 - Salmo salar (Atlantic salmon) - 100 mg/l - 96,0 h Remarks: (External MSDS) Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h Remarks: (External MSDS) Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 0.024 - 0.026 mg/l - 96 h Remarks: (ECOTOX Database) Toxicity to fish(Chronic toxicity) mortality NOEC - Oryzias latipes - 27,2 mg/l - 28 d Remarks: (ECOTOX Database) 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at

levels of 0.1% or higher.

12.6 Endocrine disrupting properties

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Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. 12.7 Other adverse effects

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.
SECTION 14: Transport information

14.1 UN number					
ADR/RID: 3077		IMDG: 3077	IATA: 3077		
14.2 UN proper ship		in the second se			
ADR/RID	: ENVIRONMENTALLY HAZA	RDOUS SUBSTANCE, SOLID, N.O.S.	(2,4-		
	dichlorophenoxyacetic acid; 2,4-D (ISO))				
IMDG	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,4-				
	dichlorophenoxyacetic acid; 2,4-D (ISO))				
IATA	: Environmentally hazardous substance, solid, n.o.s. (2,4-dichlorophenoxyacetic				
	acid; 2,4-D (ISO))				
14.3 Transport haza	ard class(es)				
ADR/RID: 9		IMDG: 9	IATA: 9		
14.4 Packaging gro	up				
ADR/RID: III		IMDG: III			
14.5 Environmental	hazards				
ADR/RID: yes		IMDG Marine pollutant: yes	IATA: yes		
14.6 Special precautions for user					
	Tunnel restriction code : (-)				
Further information	: No data available				
SECTION 15: Real	latory information				
15.1 Safety, health and environmental regulations/legislation specific for the					
substance or mixture					
This material safety data sheet complies with the requirements of Regulation (EC) No.					
1907/2006.					
Authorisations and/or restrictions on use					
National legislation					
Seveso III: Directive 2012/18/EU of the					
European Parliament and of the Council					
on the control of major-accident hazards					
involving dangerous substances.					
E1 ENVIRONMENTAL HAZARDS					
Other regulations					
Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or					
stricter national regulations where applicable.					
Take note of Dir 94/33/EC on the protection of young people at work.					
15.2 Chemical Safety Assessment					

For this product a chemical safety assessment was not carried out

Section 16: Other Information

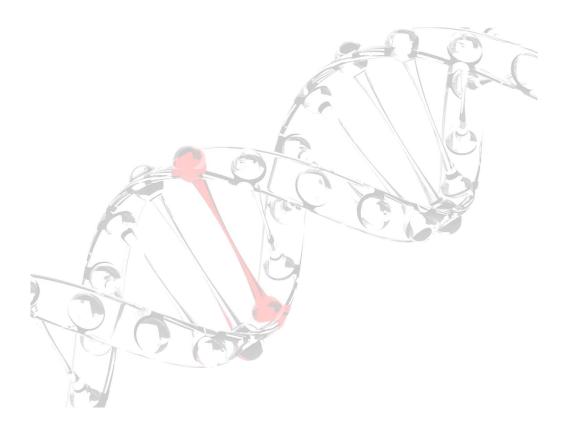
This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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