

SAFETY DATA SHEET



Product Name: TRICHLOR TABLETS (20 gm, 100 gm, 200 gm, 500 gm)

SDS Reference 005

Version No. 1

Revision No.

Authorisation date September 13th, 2006

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

Product Name TRICHLOROISOCYANURIC ACID TABLETS
Synonym (s) CHLORINE TABLETS; STABILISED CHLORINE TABLETS; MINI TABS; MAXI TABS

PLASTICA LTD
Perimeter House,
Napier Road, Telephone +44 (0) 1424 857857
St Leonards-on-Sea, East Sussex, TN38 9NY

Emergency Telephone 09062 655005 (24hr)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation CHLORINATED ISOCYANURATE
CAS number 87-90-1
EINECS number 201-782-8
EC Index number 613-031-00-5

3. HAZARDS IDENTIFICATION



Physical & Chemical: CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE

OXIDISING



Health: HARMFUL IF SWALLOWED.
CONTACT WITH ACIDS LIBERATES TOXIC GAS
IRRITATING TO EYES AND RESPIRATORY SYSTEM.

HARMFUL



Environmental: VERY TOXIC TO AQUATIC ORGANISMS. MAY CAUSE LONG-TERM
ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

**DANGEROUS
FOR THE
ENVIRONMENT**

4. FIRST AID MEASURES**General information**

Inhalation	Remove casualty to fresh air and provide warmth and rest. If necessary seek medical advice.
Skin contact	Wash contaminated skin with soap and large quantities of water at least 15 minutes. Remove contaminated clothing immediately and wash before re-use. If necessary seek medical advice.
Eye contact	Immediately wash out eye thoroughly with plenty of water until irritation subsides. If irritation persists, seek medical advice (e.g. an ophthalmologist)
Ingestion	Do NOT induce vomiting. Drink plenty of water and if necessary seek medical advice
Further information	

5. FIRE FIGHTING MEASURES

General hazard	THE PRODUCT WILL BURN IN A FIRE
Extinguishing media	In case of fire, ONLY use copious amounts of water.
Extinguishing media not to be used	Small volumes of water, foam, dry chemical
Special exposure hazards	The thermal decomposition products released should be considered toxic if inhaled. Do not approach fire from a leeward direction.
Protective equipment	Wear self-contained breathing apparatus.
Further information	Contact with combustible material may cause fire Avoid run-off water entering the drains (e.g. use barriers)

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up	Adhere to personal protective measures. Take up mechanically (e.g. sweep or vacuum up) into a suitable container. Label container and dispose of as prescribed. Clean up a spillage with a dry, plastic scoop. Any spillage should be returned into the original container but in a dry, clean, plastic or glass container. Wash remainder away with much water.
Environmental considerations	Do not allow the product to enter ground or waste water. If this occurs, inform the local water authority at once.
Further information	

7. HANDLING & STORAGE

Advice on safe handling	Handle in accordance with good hygiene and safety practice. Do not breathe dust or fumes. May be fatal if swallowed. Keep the raising and deposition of dust to a minimum. Keep away from combustible materials (e.g. organic substances). Keep away from sources of ignition - NO SMOKING!
Storage conditions	Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool (< 25°C) and dry. Keep away from incompatible materials. TCCA may react with these materials forming toxic chlorine gas.
Further information	Avoid contact with nitrogen containing compounds (e.g. ammonia, urea, amines).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls	Monitoring of the workplace should be considered in accordance with EH40 (or equivalent) controls.																				
	<table> <tr> <td>LTEL (8 hour TWA):</td> <td>ppm</td> <td>10</td> <td>mg/m³</td> <td>Total inhalable dust (EH40/2005)</td> </tr> <tr> <td>LTEL (8 hour TWA):</td> <td>ppm</td> <td>4</td> <td>mg/m³</td> <td>Respirable dust (EH40/2005)</td> </tr> <tr> <td>LTEL (8 hour TWA):</td> <td>0.5 ppm</td> <td>1.5</td> <td>mg/m³</td> <td>WEL for chlorine (EH40/2005)</td> </tr> <tr> <td>STEL (15 min):</td> <td>1.0 ppm</td> <td>2.9</td> <td>mg/m³</td> <td>WEL for chlorine (EH40/2005)</td> </tr> </table>	LTEL (8 hour TWA):	ppm	10	mg/m ³	Total inhalable dust (EH40/2005)	LTEL (8 hour TWA):	ppm	4	mg/m ³	Respirable dust (EH40/2005)	LTEL (8 hour TWA):	0.5 ppm	1.5	mg/m ³	WEL for chlorine (EH40/2005)	STEL (15 min):	1.0 ppm	2.9	mg/m ³	WEL for chlorine (EH40/2005)
LTEL (8 hour TWA):	ppm	10	mg/m ³	Total inhalable dust (EH40/2005)																	
LTEL (8 hour TWA):	ppm	4	mg/m ³	Respirable dust (EH40/2005)																	
LTEL (8 hour TWA):	0.5 ppm	1.5	mg/m ³	WEL for chlorine (EH40/2005)																	
STEL (15 min):	1.0 ppm	2.9	mg/m ³	WEL for chlorine (EH40/2005)																	
Engineering controls	Ensure adequate ventilation of working area (e.g. local exhaust ventilation).																				
Personal protection	Observe normal standards for handling chemicals. Avoid breathing dust and released chlorine gas and eye and skin contact. Wash hands before breaks and after work. Wear personal protective equipment appropriate to the task (see below)																				
Eye protection	Safety goggles or face shield (i.e. EN 166 approved)																				
Skin protection	Natural rubber latex gloves (also consider your own risk assessment; e.g. breakthrough times, rates of diffusion and degradation, tasks undertaken)																				
Respiratory protection	When dusty conditions are encountered, wear a NIOSH/OSHA full face respirator with chlorine cartridge and dust pre-filter.																				
Other protection	Protective overall																				

9. PHYSICAL & CHEMICAL PROPERTIES

Physical form	Tablets or crystalline solid			
Colour	White			
Odour	Chlorine-like			
pH	2.5-3.3 (1% aqueous solution 25 Celsius)			
Boiling pt / range	N/A	°C		
Melting pt / range	225-230	°C (decomposes)		
Flash point	Not flammable	°C		
Auto flammability	°C			
Density				
Explosive limits	Lower:	% (v/v)	Higher:	% (v/v)
Water solubility	At. 1.0 g/100g water @ 25°C			
Additional information				

10. STABILITY & REACTIVITY

Stability	Danger of explosion if heated.
------------------	--------------------------------

Product Name:

TRICHLOR TABLETS

SDS Reference 005

10. STABILITY & REACTIVITY

Thermal decomposition	225°C. Exothermic decomposition is self-sustaining with evolution of toxic gases.
Conditions to avoid	Heat, small quantities of water, contact with combustible materials.
Material to avoid	The product is incompatible with oxidisable substances, acids and nitrogen containing chemicals.
Hazardous reactions	Exothermic reactions may occur with oxidisable organic or inorganic substances. Reaction with acids causes release of chlorine. Reacts violently with small volumes of water to generate explosive nitrogen trichlorides.
Hazardous decomposition products	Chlorine and traces of phosgene above 200°C.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	LD ₅₀ rat (oral)	1,000 mg/kg	Slightly toxic
Dermal compatibility	Moderate irritant causing erythema and oedema (rabbit)		
Mucous membrane compatibility	Severely irritant (rabbit eye)		

12. ECOLOGICAL INFORMATION

Acute toxicity	LC ₅₀	Fish	mg/l	No data available
Degradability	No data available			
Further information	The product is toxic to fish and aquatic organisms. Do not allow to get into waste water or waterways; if this occurs, inform the relevant water authority at once. German water hazard class (WGK) = 2 (hazardous)			

13. DISPOSAL CONSIDERATIONS

Advice on disposal	In accordance with national and local authority regulations, e.g. The Hazardous Waste (England & Wales) Regulations 2005.
Contaminated packaging	Treat empty containers in the same way as the product or if possible wash out thoroughly and recycle. Incineration is recommended.

14. TRANSPORT INFORMATION

United Nations number	UN 2468
Packaging group	II
IMDG code	5.1/2468/II
RID / ADR	5.1, II
ICAO / IATA	5.1/2468/II
Marine pollutant	The product should be marked as a marine pollutant.
Proper shipping name	TRICHLOROISOCYANURIC ACID, DRY
Emergency action code	2WE

15. REGULATORY INFORMATION

Classification & labelling The product is classified in accordance with the Chemicals (Hazard Information and Packaging for Supply) Regulations [CHIP 3.1] EC Label: 201-782-8



OXIDISING



HARMFUL



**DANGEROUS
FOR THE
ENVIRONMENT**

Risk phrases	R8	CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE
	R22	HARMFUL IF SWALLOWED.
	R31	CONTACT WITH ACIDS LIBERATES TOXIC GAS
	R36/37	IRRITATING TO EYES AND RESPIRATORY SYSTEM.
	R50/53	VERY TOXIC TO AQUATIC ORGANISMS; MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
Safety phrases	S2	KEEP OUT OF THE REACH OF CHILDREN.
	S8	KEEP CONTAINER DRY
	S26	IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
	S41	IN CASE OF FIRE AND/OR EXPLOSION DO NOT BREATHE FUMES.
	S60	THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS HAZARDOUS WASTE.
	S61	AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/SAFETY DATA SHEET.

16. OTHER INFORMATION**Further information**

Sources of data The Approved Supply List, EH40/2005 and other suppliers' safety data sheets

Date of issue 03-05-2006

This 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. Such information is, to the best of PLASTICA'S limited knowledge and belief, accurate, and reliable as of the date of authorisation of this safety data sheet. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to be satisfied as to the suitability and completeness of such information for the product as used.

Data sheet prepared by Rising HS&E Services.