



MATERIAL SAFETY DATA SHEET PANTERA 40EC

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PREPARED BY : D PEDDER
UPDATED : 25/01/2007

COMPANY DETAILS:

Name : Chemtura (Pty) Ltd
Address : 16 Kelly Road, Jet Park, Boksburg
Tel No : (011) 397 4336
Fax No : (011) 397 4316
Emergency Tel No : 082 452 6865 OR 0860 333 911

Chemtura Corporation urges the recipient of this Safety Data Sheet to study it carefully to become aware of Hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents and contractors of the information on this sheet, (2) furnish a copy to each of your customers for the product, and (3) request your customers to inform their employees and customers as well.

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING:

Identification of the substance or preparation : PANTERA 40EC
Chemical Name : Quizalfop-p-tefuryl
Use of substance/preparation : Herbicide
Company identification : Chemtura Europe Ltd.
Kennet House
4 Langley Quay
Slough Berkshire
SL3 6EH
United Kingdom
Emergency telephone number : +44 (0)208 762 8322
For additional emergency telephone numbers see section 16 of the Safety Data Sheet
Environmental, Health & Safety Department : Tel: +44(0)1753.603.000

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	% by weight	Hazard	Danger Symbol
Quizalofop-P-tefuryl CAS# 119738-06-6 EINECS/ELINCS# 414-200-4	4,41	R22 R48/22 R50/53 R61 R62 R68	T N
Tristyrylphenol, ethoxylated CAS# 99734-09-5 EINECS/ELINCS# -	<5	R36/38 R52/53	Xi
Tetrapropylene benzene sulphonate Ca salt CAS# 11117-11-6 EINECS/ELINCS# 234-360-7	<5	R21 R34 R52/53	C
N-Methyl-2-pyrrolidone CAS# 872-50-4 EINECS/ELINCS# 212-828-1	<5	R36/38	Xi
Oleyl alcohol, ethoxylated CAS# 9004-98-2 EINECS/ELINCS# -	<15	R36/38	Xi
Heavy aromatic solvent naphtha CAS# 64742-94-5 EINECS/ELINCS# 265-198-5	25-35	R65 R66 R67 R51/53	Xn N

3. HAZARDS IDENTIFICATION

Main Hazard and Effects:

May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause harm to the unborn child. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness. Possible risk of irreversible effects.

4. FIRST-AID MEASURES

Swallowing

Do not induce vomiting. Rinse mouth with water. Give two glasses of milk or water at once., Obtain medical attention in all cases.

Inhalation

Remove to fresh air. Obtain medical attention immediately

Skin contact

Remove contaminated clothing., Rinse affected skin with copious amounts of water, using a mild cleaning agent., Obtain medical attention if contact has been wide spread and prolonged, or if irritation persists.

Eye contact

Immediately flush eyes with water and continue washing for several minutes. Obtain medical attention if discomfort persists

5. FIRE-FIGHTING MEASURES

Flash Point: 66,1°C

Hazardous combustion products

Irritating fumes
Oxides of carbon
Oxides of nitrogen

Special fire fighting procedures

Do not discharge extinguishing waters into streams, rivers and lakes

Special protective equipment for firefighters

Body covering protective clothing, full "turn-out" gear
Self-contained breathing apparatus

Extinguishing media

Suitable : Large fires : Alcohol-type foam or universal-type foams
Small fires : CO2, Dry chemical
Unsuitable : water jets

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Evacuate unnecessary personnel. Avoid all contact with material. Wear suitable protective equipment
Environmental precautions : Prevent from entering sewer system, surface water or soil.
Methods for cleaning up : Small spills: Absorb on inert material such as sand, earth, vermiculite. Collect for disposal.
Large spills: Dike to contain spill. Pump excess material into suitable container (metal drums, metal tank, or such).

7. HANDLING AND STORAGE

HANDLING

Handling precautions: Wear recommended personal protection equipment. Warn personnel about the dangers of the product. Keep container tightly closed.

STORAGE

Storage requirements: Store in cool dry place

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES:

Component	Country	Type	Value	Remark
N-Methyl-2-pyrrolidone	Denmark	TWA	20 mg/m ³ 5 ppm	
	Finland	TWA	100 mg/m ³ 25 ppm	
	Germany	MAK value,8-hours average value	80 mg/m ³ 19 ml/m ³	
	Ireland	OEL	101 mg/m ³ 25 ppm	TWA
	Norway		20 mg/m ³ 5 ppm	
	Sweden	NGV	200 mg/m ³ 50ppm	
		KTV	300 mg/m ³ 75 ppm	
	Netherlands	TGG	80 mg/m ³ 20ppm	
	Great Britain	TWA	103 mg/m ³ 25ppm	
		STEL	309 mg/m ³ 75ppm	

No other exposure limits have been established

Personal Protection

Respiratory protection

Toxic vapors may be evolved. Respirator with gas filter and specific cartridge

Hand protection/protective gloves

Chemical resistant protective gloves

Eye protection

Full face shield

Skin protection

Chemical resistant protective clothing

Other protective equipment

Eye bath, Safety shower

Industrial hygiene measures

Before eating, drinking or smoking, wash hands and face thoroughly with soap and water

Engineering Controls

Ventilation

Provide local exhaust or process enclosure ventilation system

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical state : Liquid
Color : Pale yellow
Odor : Unspecified

OTHER PROPERTIES

Boiling Point : Not available
pH : 6,6 – 7,2
1% suspension in H₂O
Density : 0,906 g/cm³ at 20°C
Solubility in water : No data available
Solubility in organic solvents : No data available
Flashpoint : 66,1°C
Autoignition temperature : >300°C
Dynamic viscosity : 9,85 mPa.s at 20 °C
Surface tension : 33,9 dyn/cm at 25 °C

10. STABILITY AND REACTIVITY

Stability : This product is stable under normal storage and handling conditions
Incompatible materials : Oxidizing agents
Strong acids
Strong bases
Hazardous Combustion Products : Irritating fumes
Oxides of carbon
Oxides of nitrogen
Hazardous polymerization : Will not occur

11. TOXICOLOGICAL INFORMATION

Swallowing

Test results
Acute toxicity : LD50 Rat
Result : >2.000 mg/kg

Skin absorption

Test results
Acute toxicity : LD50 - Rat
Result : >4.000 mg/kg

Inhalation

Test results
Acute toxicity : LD50 - Rat

Result : >5,3 mg/l
Exposure time : 4h

Skin contact

Test results

Skin irritation : Species: Rabbit
Classification: Not irritating

Eye contact

Test results

Eye irritation : Species : Rabbit
Classification: Non irritant

Sensitization

Test results : Species : Guinea Pigs
Result : May cause sensitization by skin contact

12. ECOLOGICAL INFORMATION

Test results : Exposure time : 28d
340

AQUATIC TOXICITY

Acute toxicity fish : LC50 – Rainbow trout (*Oncorhynchus mykiss*)
Result: 8,2 mg/l
Exposure time: 96 h

Acute toxicity to plants : EC50 – *Selenastrum capricornutum*
Result: 0,65 mg/l
Exposure time: 72 h

Acute toxicity to aquatic : EC50 – Water flea (*Daphnia magna*)
Invertebrates Result: 4,8 mg/l
Exposure time: 48 h

13. DISPOSAL CONSIDERATIONS

General : Avoid discharge to sewers and natural waters. Incinerate in a furnace where permitted under national and local regulations.

Non-cleaned : Empty drums should be decontaminated and either passed to an
packages approved drum reconditioned or destroyed. Containers that cannot be cleaned must be treated as waste.

14. TRANSPORT INFORMATION

ADR/RID

Proper shipping name : Environmentally hazardous substance, liquid, N.O.S.
Class : 9 (M6)

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UN No. : 3082
Packing Group : III
Hazard Number : 90
Label : 9

IMDG Classification

Proper shipping name : Environmentally hazardous substance, liquid N.O.S,
Class : 9
Subsidiary risk : marine pollutant
UN ID# : UN 3082
Packing group : III

ICAO classification

Proper shipping name : Environmentally hazardous substance, liquid N.O.S,
Class : 9
UN ID# : UN 3082
Packing Group : III

15. REGULATORY INFORMATION

EC Classification

Danger Symbols : T N
Risk Phrases : R43 May cause sensitization by skin contact
R50/53 very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
R61 May cause harm to the unborn child
R66 Repeated exposure may cause skin dryness or cracking
R67 Vapors may cause drowsiness and dizziness
R68 Possible risk or irreversible effects
Safety Phrases : S28 After contact with skin, wash immediately with plenty of soap and water
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
S45 in case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S53 Avoid exposure – obtain special instructions before use
S57 Use appropriate container to avoid environmental contamination
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets

16. OTHER INFORMATION

List of R-phrases used in data sheet. See section 15 for classification details

Risk phrases : R22 Harmful if swallowed
R36/38 Irritating to eyes and skin

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R48/22 Harmful : Danger of serious damage to health by prolonged exposure if swallowed
R50/53 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R61 May cause harm to the unborn child
R62 Possible risk of impaired fertility
R65 Harmful : may cause lung damage if swallowed
R66 Repeated exposure may cause skin dryness or cracking
R67 Vapours may cause drowsiness and dizziness
R68 possible risk of irreversible effects

Further information : Where appropriate, use CEN approved personal protection Equipment. For further information see the webpage. This safety data sheet conforms to EC Directive 2001/58 and amendments.

MAY BE ON THE INVENTORY LIST BUT NOT NECESSARY REGISTERED, (Korea, China, New Zealand) CONSULT REGULATORY SPECIALIST

Chemtura Corporation
Emergency Telephone Numbers

Europe	All European companies	+44 (0) 208 762 8322
Asia Pacific	Australia, New Zealand	+44 (0) 870 190 6777
	China, Hong Kong, Singapore, Philippines, Taiwan, Vietnam, India	+65 63 222 513
	Japan, North & South Korea	+65 63 222 514
	Indonesia	+62 21 230 5992
	Malaysia	+60 3 205 35 754
	Thailand	+66 2 642 7851
Middle East	All except Israel	+961 3 487 287
	Israel	+44 (0) 208 762 8322
Africa	Arabic speaking countries	+961 3 487 287
	All other countries	+44 (0) 208 762 8322
Latin America	All	+44 (0) 208 762 8322

STP Standard temperature and pressure
W/W Weight/Weight

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