

MATERIAL SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF SUBSTANCE/ PREPARATION AND COMPANY

XTRA GR3000

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SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature:
N-Methylpyrrolidone
CAS No: 872-50-4 EINECS No: 212-828-1

SECTION 3. HAZARDS IDENTIFICATION

Critical hazards to man and the environment: irritant.

SECTION 4. FIRST AID MEASURES

General advice: Remove all contaminated clothing.
Inhalation: Keep patient calm, remove to fresh air, summon medical help.
Skin: Wash thoroughly with soap and water.
Eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult eye specialist.
Ingestion: Rinse mouth and then drink plenty of water.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Water spray, dry extinguishing media, foam, carbon dioxide (CO₂).
Special protective equipment: In case of fire, wear a self-contained breathing apparatus.
Further information: Collect separately contaminated extinguishing water, do not allow to reach sewerage or effluent systems.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure adequate ventilation.
Environmental precautions: Sources of ignition should be kept clear.
Methods for cleaning up: Large spillages should be dammed-off and pumped into containers; soak up remainder with absorbent material and dispose of in accordance with local regulations. Small spillages can be swilled away with water. Wastewater must be disposed of correctly.

SECTION 7. HANDLING AND STORAGE

Handling: Protection against fire and explosion: Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.
Storage: Containers should be stored tightly sealed in a cool and dry place.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information on the layout of technical plant (see 7)
Components with workplace control parameters
Refer to the current edition of HSE Guidance Note EH40 on Occupational Exposure Limits (UK).
Personal protective equipment: Hand protection: Neoprene gloves, protective gloves (PVC) Eye protection: Tightly fitting safety goggles, face shield.
General safety and hygiene measures: Avoid contact with the skin, eyes and clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid.	Vapour pressure: (20°C)	0.32 mbar
Colour:	Colourless.	Density: (25°C)	1.028 g/cm ³
Odour:	Faint specific odour.	Solubility in water:	(20°C) fully miscible
Change in physical state		Solubility in other solvents:	
Melting point/melting range:	-23.6°C	pH value:	(at 100 g/l, 20°C) 8.5-10
Boiling point/boiling range:	204.3°C	Octanol/water partition coefficient (low POW):	-0.46
Flash point:	91°C (DIN 51 758)	Viscosity: (20°C)	1.796 mPa.s
Explosion limits:			
- lower	1.3 Vol %		
- upper	9.5 Vol %		
Ignition temperature:	245°C (DIN 51 794)		

SECTION 10. STABILITY AND REACTIVITY

Hazardous reactions:
Exothermic reaction with: strong alkalis and strong acids.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50/oral/rat: 3 600 mg/kg

LD50/dermal/rabbit: 8 000 mg/kg

LC50/inhal./rat: 5.1 mg/1/4h (spray)

Primary skin irritation/rabbit/BASF test: irritant

Primary mucous membrane irritation/rabbits' eyes/BASF test: irritant.

Acute inhalation hazard (rat; test results depending on toxicity and volatility): No mortality after 8 h exposure in a highly enriched and/or saturated atmosphere at ambient temperatures.

No sensitising effect.

Other information

Genotoxicity: no mutagenic effect.

Reproduction toxicity

Only after administration of very high doses of the substance near the lethal dose: Possibility of fetal damage.

This finding cannot be described as teratogenicity.

After inhalation at high concentrations (under conditions encountered in practice): no comparable effect.

SECTION 12. ECOLOGICAL INFORMATION**Elimination information**

Test method: OECD-Screening Test

Degree of elimination: >90%

Method of analysis: DOC reduction

Evaluation: slightly biodegradable.

Behavior and environmental fate

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Ecotoxic effects

Toxicity to fish: LC50/Leuciscus idus/: 4000 mg/l/96h

Toxicity to daphnae (acute):

EC/LC50 (24h): >1000 mg/l

Toxicity to algae: EC/LC50 (72 h): >500 mg/l

Toxicity to bacteria: EC/LC (48 h): >9000 mg/l

Further ecological information

COD-Value: 1 600 mg/ml

BOD5-Value: 1 100 mg/ml

AOX: not relevant

SECTION 13. DISPOSAL CONSIDERATIONS

Must be disposed of by special means, e.g. suitable incineration, in accordance with LoA regulations.

Contaminated packaging:

Contaminated packs should be emptied as far as possible, they can then be passed for recycling after being thoroughly cleaned.

The 1991 Environmental Protection (Duty of Care) Regulations SI no 2839 and amendments should be noted (UK)

SECTION 14. TRANSPORT INFORMATION

Land transport

ADR/RID/GGVs/GGVE

Class 3

Item number/letter: 32c

Hazard-no: 30

Substance no.: 1993

Inland, waterway transport

ADN/ADNR

not hazardous

Sea transport

IMDG/GGVSae

not hazardous

Air transport

ICAO/IATA

not hazardous

SECTION 15. REGULATORY INFORMATION**Labeling according to EEC Directives**

The substance should be labeled as follows according to EEC "Hazardous Substances" Directive:

EEC-No 606-021-00-1

Labeling based on our own experience:

Xi - Irritant

R36/38 - Irritating to eyes and skin.

S24 - Avoid contact with skin.

S41 - In case of fire and/or explosion do not breathe fumes.

National legislation/regulations

This product is classified under the 1993 Chemicals (Hazard Information and Packaging) Regulations, SI No 1746 (UK).

This product should be considered when making any assessment under the 1988 Control of Substances Hazardous to Health Regulations SI No 1657, and amendment (UK)

SECTION 16. OTHER INFORMATION

The information contained in this data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) Regulations. It does not constitute the user's own assessment of workplace risks are required by other health and safety legislation. The provisions of the Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of the relevant legislation are complied with.

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations. The information contained herein is based on the current state of our knowledge and is intended to describe products from the point of view of safety requirements and thus should not be construed as guaranteeing specific properties.

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