



SAFETY DATA SHEET

CIVIC CONTROL ANE, ANE 7000 AND ANE 7100



1. identification of the substance/preparation and of the company/undertaking

Date issued	17.03.2008
Revision	05.11.2010
Product name	CIVIC CONTROL ANE, ANE 7000 AND ANE 7100
Article no.	Intern no.: 3375-01.eng.02_N
Product group	Compound in the Subtek Control, Subtek Velcro, Civec Control, Fortis Advantage 100S and Centra Gold 100S. Civilian explosives.
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2. hazards identification

Classification	O; R44, R9
Hazard description	<p>Fire and explosion: Explosive when mixed with combustible material. Risk of explosion if heated under confinement.</p> <p>Health: The product is not classified as hazardous to health. At fire or strong heating, toxic gases of NO, NO₂ are evolved, posing a potential risk when inhaled, and irritating the respiratory system. Ammonia gas may be developed when the emulsion matrix is exposed to alkaline products such as soap, concrete or lye.</p> <p>Environment: The product is not classified as harmful to the environment.</p>

3. composition/information on ingredients

Component name	Identification	Labelling/classification	Contents
Ammonium nitrate	CAS no.: 6484-52-2 EC no.: 229-347-8	O; R44, R9	60 - 80 %
Sodium nitrate	CAS no.: 7631-99-4 EC no.: 231-554-3	O; R8	5 - 15 %
Highly refined mineral oils.			3 - 8 %
Emulsifier			0,5 - 5 %
Column headings	CAS no. = Chemical Abstracts Service; EU (Einecs or Elincs number) =		

	European inventory of Existing Commercial Chemical Substances; Ingredient name = Name as specified in the substance list (substances that are not included in the substance list must be translated, if possible). Contents given in; %, %wt/wt, %vol/wt, %vol/vol, mg/m3, ppb, ppm, weight%, vol%
HH/HF/HE	T+ = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritating, E = Explosive, O = Oxidizing, F+ = Extremely flammable, F = Very flammable, N = Environmental hazard
Component comments	See section 16 for explanation of Risk-phrases listed above. Ingredient number 3 contains <3% DMSO-extract. This indicates that the ingredient is not carcinogenic.

4. first-aid measures

General	If in doubt, get medical advice.
Inhalation	Fresh air and rest. In case of unconsciousness, loosen tight fitting clothing. If respiratory problems, provide artificial respiration or oxygen. Seek medical advice. Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Immediately call an ambulance.
Skin contact	Remove contaminated clothing. Wash the skin immediately with soap and water. Contact physician if symptoms appears.
Eye contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Contact physician if irritation persists. By prolonged rinse, use lukewarm water to avoid damage to the eye.
Ingestion	Rinse mouth thoroughly. Get medical attention.

5. fire-fighting measures

Suitable extinguishing media	Extinguish surrounding fires with suitable extinguisher.
Improper extinguishing media	Do not fight fires involving emulsion matrix, risk of explosion. Fire in matrix can not be extinguished with any fire fighter equipment. Fire fighting should be limited to preventing spread of other fires.
Fire and explosion hazards	Civic Control ANE, ANE 7000 and ANE 7100 are heavily inflammable and have limited inflammability. Explosive when mixed with combustible material. Risk of explosion if heated under confinement. Explosion or fire may create toxic vapours such as: Nitrogen oxides. Carbon oxides. Ammonia.
Personal protective equipment	Use fresh air equipment when the product is involved in fire. In case of evacuation, an approved protection mask should be used. See also sect. 8.
Other Information	Evacuate all personnel to a predetermined safe location. Notify authorities in accordance with emergency response procedures. If possible without risk, immediately remove containers close to the fire.

6. accidental release measures

Personal precautions	Use protection equipment as given in section 8.
Environmental precautions	Do not allow to enter into sewer, water system or soil.
Methods for cleaning	Sweep up remnants with non-sparking tools and remove. The product is hazardous waste and should be transferred to a closable, labelled salvage container for disposal by an appropriate method(See sect. 13)

7. handling and storage

Handling	Only to be handled by qualified personnel. Avoid smoking and use of open fire. Protect against heating.
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	Must not be stored or transported with combustible materials. Avoid direct contact.
Storage	Store separated from: Sodium nitrite, N10 and L206. To be stored at temperatures between 10 and 25 °C. Keep away from food, drink and animal food.
Special risks and properties	Risk of explosion if heated under confinement.

8. exposure controls/personal protection

Exposure limit values

Component name	Identification	Unit	Year
Oil mist (mineral oil particles)		8h: 1 mg/m ³	2003
Oil vapour		8h: 50 mg/m ³	2003
Nitrogen Dioxide	CAS no.: 10102-44-0 EC no.: 233-272-6 Index no.: 007-002-00-0	8h: 0,6 ppm 8h: 1,1 mg/m ³ , 9)	2007
Nitrogen oxide	CAS no.: 10102-43-9 EC no.: 233-271-0	8h: 25 ppm 8h: 30 mg/m ³	2007
Carbon monoxide	CAS no.: 630-08-0 EC no.: 211-128-3 Index no.: 006-001-00-2	8h: 25 ppm 8h: 29 mg/m ³ , 4)	2007
Carbon dioxide	CAS no.: 124-38-9 EC no.: 204-696-9	8h: 9000 mg/m ³	2007
ammonia, anhydrous	CAS no.: 7664-41-7 EC no.: 231-635-3 Index no.: 007-001-00-5	8h: 18 mg/m ³ Value: 25 mg/m ³ 15min	

Exposure controls

Other Information	The given safety equipment is a suggestion. Risk assessment (actual risk) may lead to other requirements. Norwegian treshold limit value on pollution in workspace valid from november 2007.
Occupational exposure controls	No eating, drinking or smoking while working with this material. Wash hands at the end of each work shift and before eating, smoking and using the toilet.
Respiratory protection	Normally not required. In case of inadequate ventilation: Use respiratory equipment with gas filter, type B.
Hand protection	Use gloves from resistant material, eg.: Nitrile. Polyvinyl chloride (PVC). Penetration time > 8 hours.
Eye protection	Use approved safety goggles or face shield.
Skin protection (other than of the hands)	Wear appropriate clothing to prevent any possibility of skin contact.
Other Information	Eye wash facilities should be available when handling this product. Clothing that becomes wet or contaminated should be changed.

9. physical and chemical properties

Physical state	Highly viscous substance
Odour	Weak Oil smell
Colour	Tan
Solubility in water	Poor solubility.
Specific gravity	Value: 1,35-1,45 kg/litre

10. stability and reactivity

Conditions to avoid	Heating.
Materials to avoid	Strong acids. Nitrites. Reducing agents. Bases.
Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Nitrous gases (NOx). Ammonia.
Stability	Stable under normal temperature conditions and recommended use.

11. toxicological information

Other information regarding health hazards

Inhalation	Gas or vapour may irritate respiratory system. Inhalation of nitrous gases may lead to pulmonary edema.
Skin contact	Moderately irritating.
Eye contact	Moderately irritating.
Ingestion	May cause discomfort if swallowed.
Chronic effects	No known chronic or acute health hazards.
Sensitisation	Sensitizing properties are not known.
Carcinogenicity	Carcinogenic properties are not known.
Teratogenic properties	Effects on fetus development are not known.
Reproductive toxicity	Effects harmful to reproduction are not known.
Mutagenicity	Mutagenic properties are not known.

12. ecological information

Other ecological information

Ecotoxicity	The product is not classified as dangerous for the environment.
Mobility	The product has poor water-solubility. Nitrate salts are completely soluble, but emulsion dissolution is very slow.
Persistence and degradability	This product mainly consists of inorganic compounds which are not biodegradable. The remaining compounds of the product are expected to be easily biodegradable.
Bioaccumulative potential	Will not bio-accumulate.

13. disposal considerations

EWC waste code	EWC: 16 09 04 oxidising substances, not otherwise specified
NORSAS	7122 Strongly reactive substance
Product classified as hazardous waste	Yes
Specify the appropriate methods of disposal	Deliver as hazardous waste according to the local regulations. The hazardous waste code (EWC/ EAL)-Code) is intended as a guide. The code must be given by the user if the use differs from the one given here.

14. transport information

Proper Shipping Name	AMMONIUM NITRATE EMULSION
Product name (national)	AMMONIUM NITRATE EMULSION
Dangerous goods ADR	Status: Yes UN no.: 3375 Class: 5.1 Hazard no.: 50 Packing group: II Proper shipping name: AMMONIUM NITRATE EMULSION
Dangerous goods RID	Status: Yes UN no.: 3375

	Class: 5.1 Packing group: II Proper shipping name: AMMONIUM NITRATE EMULSION
Dangerous goods IMDG	Status: Yes UN no.: 3375 Class: 5.1 Packing group: II IMDG Marine pollutant: No EmS: F-H, S-Q Proper shipping name: AMMONIUM NITRATE EMULSION
Dangerous goods ICAO/IATA	UN no.: 3375 Class: 5.1 Proper shipping name: AMMONIUM NITRATE EMULSION Other applicable information.: Forbidden

15. regulatory information

Hazard symbol



Oxidizing

R phrases	R9 Explosive when mixed with combustible material. R44 Risk of explosion if heated under confinement.
S phrases	S17 Keep away from combustible material. S41 In case of fire and/or explosion do not breathe fumes.
References (laws/regulations)	Dangerous goods regulation. Direktiv (EC) nr 1907/2006 (REACH) Annex II: Safety data sheets. Occupational Exposure Limits. EH40/2005. CHIPS Regulation. Regulation on Hazardous Waste. Norwegian regulation on the handling of explosives. The Safety Data Sheet is made on the basis of information given by the producer.

16. other information

List of relevant R phrases (under headings 2 and 3).	R44 Risk of explosion if heated under confinement. R8 Contact with combustible material may cause fire. R9 Explosive when mixed with combustible material.
Information which has been added, deleted or revised	Company name, Postal address
Supplier's notes	Information in this document is to be made available for all who handle the product.
Checking quality of information	This MSDS is quality controlled by National institute of Technology, Norway, which complies with the Quality Management System requirements specified in NS-EN ISO 9001:2000.
Responsible for safety datasheet	Orica Norway AS