

NOVADAN®

SAFETY DATA SHEET

Game Addi Oxi

NOVADAN®

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

SECTION 1: Identification of the substance / mixture and of the company / undertaking

Date issued 30.08.2012

Revision date 22.05.2017

1.1. Product identifier

Product name Game Addi Oxi

Article no. 12018, 12019, 12027, 12394

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product group Oxidizing additive.

Relevant identified uses
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
PC35 Washing and cleaning products (including solvent based products)
PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
ERC6B Industrial use of reactive processing aids

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Registrant

Company name Novadan ApS

Postal address Platinvej 21

Postcode DK-6000

City Kolding

Country Danmark

Tel + 45 76 34 84 00

Fax + 45 75 50 43 70

E-mail sds@novadan.dk

Website www.novadan.dk

1.4. Emergency telephone number

Emergency telephone
Description: UK: NHS: 111
EI: National Poisons Information Centre, 24/7: 01 809 2166

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]

Acute tox. 4; H302

Acute tox. 4; H332

Eye Dam. 1; H318

Substance / mixture hazardous properties

For further information, please refer to section 11.

Additional information on classification

The informations stated in this MSDS, applies for the concentrated product. See Sec. 16, for informations regarding recommended user solutions

2.2. Label elements

Hazard Pictograms (CLP)



Composition on the label

Hydrogen peroxide

Signal word

Danger

Hazard statements

H318 Causes Serious eye damage.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

Precautionary statements

P280 Wear eye protection.

P261 Avoid breathing mist/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

2.3. Other hazards

Health effect

May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY. Vapours may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness.

See section 11 for additional information on health hazards.

Environmental effects

Contains a substance which causes risk of hazardous effects to the environment.

This product does not contain any PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Hydrogen peroxide	CAS no.: 7722-84-1 EC no.: 231-765-0 Index no.: 008-003-00-9 REACH Reg. No.: 01-2119485845-22-xxxx	Ox. Liq. 1; H271 Acute tox. 4; H332 Acute tox. 4; H302 Skin Corr 1A; H314 Eye Dam. 1; H318 STOT SE3; H335	30 -60 %
Benzenesulfonic acid, (1-methylethyl)-, sodium salt	CAS no.: 28348-53-0 EC no.: 248-983-7	Eye Irrit. 2; H319	1 – 5 %
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	CAS no.: 120313-48-6	Skin Irrit. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 3; H412	1 – 5 %
Substance comments	>30%: oxygen-based bleaching agents , <5%: nonionic surfactant , anionic surfactant . The full text for all hazard statements is displayed in section 16.		

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Remove affected person from source of contamination.
Inhalation	Fresh air. Get medical attention if any discomfort continues.
Skin contact	Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if irritation persists after washing.
Eye contact	Important! Immediately rinse with water for at least 15 minutes. May cause permanent damage if eye is not immediately irrigated. Make sure to remove any contact lenses from the eyes before rinsing. Immediately transport to hospital or eye specialist. Continue flushing during transport to hospital.
Ingestion	Immediately rinse mouth and drink plenty of water. Call an ambulance. Bring along these instructions. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Do not give victim anything to drink if he is unconscious.
Recommended personal protective equipment for first aid responders	Wear necessary protective equipment. For personal protection, see section 8.

4.2. Most important symptoms and effects, both acute and delayed

Acute symptoms and effects	Strongly corrosive. Causes severe burns and serious eye damage. Immediate first aid is imperative.
Delayed symptoms and effects	No known long term effects.

4.3. Indication of any immediate medical attention and special treatment needed

Other Information	In case of unconsciousness, ingestion or eye contact: Immediately call a doctor / ambulance. Show this safety data sheet.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
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5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Although not flammable, this substance has oxidising properties and may increase the rate of combustion of other materials. Closed containers can burst violently when heated, due to excess pressure build-up.
Hazardous combustion products	Fire or high temperatures create: Oxygen.

5.3. Advice for firefighters

Personal protective equipment	Wear necessary protective equipment. For personal protection, see section 8.
Fire fighting procedures	Reference is made to the company fire procedure. If risk of water pollution occurs, notify appropriate authorities. Avoid breathing fire vapours. Containers close to fire should be removed or cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Look out! The product is hazardous to your health. Avoid inhalation of vapours and aerosols and contact with skin and eyes. Wear necessary protective equipment. For personal protection, see section 8.
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6.2. Environmental precautions

Environmental precautionary measures	Do not discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.
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6.3. Methods and material for containment and cleaning up

Cleaning method	Collect with absorbent, non-combustible material into suitable containers. Wash contaminated area with water.
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6.4. Reference to other sections

Other instructions	See section 8 and section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Avoid spilling, skin and eye contact. Oxidising material – Keep away from flammable and combustible materials. Avoid excessive heat.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs. Oxidising material – Keep away from flammable and combustible materials.
Conditions to avoid	Keep away from heat, sparks and open flame.

Conditions for safe storage

Storage Temperature	Value: -20 – 35 °C
Storage Stability	Durability: 18 months.

7.3. Specific end use(s)

Specific use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Substance	Identification	Value	TWA Year
Hydrogen peroxide	CAS no.: 7722-84-1	TWA (8h): 1,4 mg/m ³ TWA (8h): 1 ppm OEL Short Term Value Value: 2 ppm OEL Short Term Value Value: 2,8 mg/m ³	
Benzenesulfonic acid, (1-methylethyl)-, sodium salt	CAS no.: 28348-53-0		

DNEL / PNEC

Substance	Hydrogen peroxide
DNEL	Group: Consumer

Route of exposure: Short term (acute) – Inhalation – Local effect

Value: 1,93 mg/m³

Remarks: ECHA

Group: Worker

Route of exposure: Long term (repeated) – Inhalation – Local effect

Value: 1,4 mg/m³

Remarks: ECHA

Group: Worker

Route of exposure: Short term (acute) – Inhalation – Local effect

Value: 3 mg/m³

Remarks: ECHA

Group: Consumer

Route of exposure: Long term (repeated) – Inhalation – Local effect

Value: 0,21 mg/m³

Remarks: ECHA

PNEC

Route of exposure: Saltwater sediments

Value: 0,047 mg/kg

Route of exposure: Soil

Value: 0,0023 mg/kg

Route of exposure: Sewage treatment plant STP

Value: 4,66 mg/l

Route of exposure: Saltwater

Value: 0,047 mg/l

Route of exposure: Freshwater sediments

Value: 0,047 mg/kg

Route of exposure: Freshwater

Value: 0,0126 mg/l

Summary of risk management measures, human

Data lacking.

Summary of risk management measures, environment

Data lacking.

8.2. Exposure controls

Recommended monitoring procedures

Not known.

Safety signs



Precautionary measures to prevent exposure

Technical measures to prevent exposure

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. An eye wash bottle must be available at the work site.

Eye / face protection

Suitable Eye Protection

Wear approved safety goggles. (EN 166).

Hand protection

Skin-/ hand protection, long term contact

For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Butyl rubber. Neoprene. Nitrile. (EN 374)

Hand protection comments

Breakthrough time for nitrile rubber, neoprene and butyl rubber is approx. 3 hours.

The recommendation is a qualified estimate based on knowledge of the components. Elastic gloves stretch when used as glove thickness and thus the breakthrough time reduced.

The EN 374-3 standard test is performed at 23°C, but the practical temperature of the glove is approx. 35°C.

The breakthrough time of the different glove guides, is therefor reduced by a factor 3.

Skin protection

Additional skin protection measures

No special precautions.

Respiratory protection

Respiratory protection necessary at

In case of inadequate ventilation use suitable respirator. Type NO-P3. (EN 143/EN149)

Thermal hazards

Thermal hazards

See section 5.

Appropriate environmental exposure control

Environmental exposure controls

See section 6.

Other Information

Other Information

DO NOT SMOKE IN WORK AREA!

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state

Fluid.

Colour

Colourless.

Odour

Slightly pungent odour.

pH

Status: In delivery state

Value: ~ 2,0

Status: In aqueous solution

Value: ~ 5,0

Comments: 1%.

Melting point / melting range

Comments: Not relevant.

Freezing point

Value: -20 °C

Boiling point / boiling range

Comments: Not relevant.

Flash point

Comments: Not relevant.

Evaporation rate

Comments: Not relevant.

Explosion limit

Comments: ikk

Bulk density	Value: ~ 1,15 kg/l.
Solubility	Comments: Completely soluble in water.
Partition coefficient: n-octanol/water	Comments: Not relevant.
Spontaneous combustability	Comments: Not relevant.
Explosive properties	Not explosive.
Oxidising properties	Strong oxidiser.

9.2. Other information

Other physical and chemical properties

Comments	No data recorded.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The product is a strong oxidizing agent that is stable under normal conditions. When heated there is a risk of decomposition. In contact with incompatible materials there is a risk of exothermic decomposition (self-increasing).
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10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Degradation products are water and oxygen, which in closed containers and pipes can cause pressure rise and explosion hazard. The released oxygen can also be oxidizing. The product is stabilized. Reacts strongly with strong acids, bases, organic chemicals and certain metal combinations.
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10.4. Conditions to avoid

Conditions to avoid	Decomposes when exposed to heat. Strong oxidiser – avoid contact with reducing agents. Avoid exposure to high temperatures or direct sunlight.
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10.5. Incompatible materials

Materials to avoid	Flammable/combustible material. Alkali metals.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Fire or high temperatures create: Oxygen.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Hydrogen peroxide
Acute toxicity	Type of toxicity: Acute Effect Tested: LD50 Route of exposure: Oral Value: 563,5 mg/kg

Test reference: OECD Guideline 401

Comments: ECHA

Type of toxicity: Acute

Effect Tested: LD50

Route of exposure: Dermal

Duration: 24h

Value: > 2000 mg/kg

Animal test species: Rabbit

Comments: ECHA

Type of toxicity: Acute

Effect Tested: LC50

Route of exposure: Inhalation.

Duration: 4h

Value: 1,5 mg/l

Comments: Mist;

Supplier ATE.

Other toxicological data

Toxicological tests on the product has not been performed.

Other information regarding health hazards

Inhalation	Aerosols irritate the respiratory system, and may cause coughing and difficulties in breathing.
Skin contact	Skin irritation is not anticipated when used normally.
Eye contact	Strongly corrosive. Causes severe burns. Immediate first aid is imperative.
Ingestion	Harmful: possible risk of irreversible effects if swallowed.
Sensitisation	No evidence for respiratory nor skin sensitization.
Mutagenicity	No evidence for germ cell mutagenicity.
Carcinogenicity	No evidence for carcinogenicity.
Reproductive toxicity	No evidence for reproductive toxicity.

Symptoms of Exposure

Symptoms of overexposure	No specific symptoms noted.
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SECTION 12: Ecological information

12.1. Toxicity

Substance	Benzenesulfonic acid, (1-methylethyl)-, sodium salt
Acute aquatic, fish	Value: > 96 mg/l Test duration: 96h Species: Fish Method: LC50
Substance	Benzenesulfonic acid, (1-methylethyl)-, sodium salt
Acute aquatic, algae	Value: > 1000 mg/l Test duration: 72h Species: Algae Method: IC50
Substance	Benzenesulfonic acid, (1-methylethyl)-, sodium salt
Acute aquatic, Daphnia	Value: > 450 mg/l Test duration: 48h Species: Daphnia Method: EC50

Ecotoxicity	Contains a substance (Aquatic Acute 1; H400 or Aquatic Chronic 1; H410) that falls within the scope of the multiplication factor rule.
Aquatic, comments	No data recorded.

12.2. Persistence and degradability

Persistence and degradability	The product is biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.
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12.4. Mobility in soil

Mobility	The product is water soluble and may spread in water systems.
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12.5. Results of PBT and vPvB assessment

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
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12.6. Other adverse effects

Environmental details, summation	For this product no classification is required for environmental hazards.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Do not allow runoff to sewer, waterway or ground. Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point. Dispose of waste and residues in accordance with local authority requirements. -
EWC waste code	EWC waste code: 0706 Classified as hazardous waste: Yes
EWL Packing	EWC waste code: 0706 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics Classified as hazardous waste: Yes
Other Information	When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste code applies to product remnants in pure form.

SECTION 14: Transport information

14.1. UN number

ADR / RID / ADN	2014
IMDG	2014
ICAO/IATA	2014

14.2. UN proper shipping name

ADR / RID / ADN	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
IMDG	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
ICAO/IATA	HYDROGEN PEROXIDE, AQUEOUS SOLUTION

14.3. Transport hazard class(es)

ADR / RID / ADN	5.1 (8)
IMDG	5.1 (8)

ICAO/IATA	5.1 (8)
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14.4. Packing group

ADR / RID / ADN	II
IMDG	II
ICAO/IATA	II

14.5. Environmental hazards

IMDG Marine pollutant	No
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14.6. Special precautions for user

Special safety precautions for user	Not relevant.
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Additional information.

Additional information.	Not relevant.
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ADR / RID - Other information

Hazard no.	58
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IMDG / ICAO / IATA Other information

EmS	F-H, S-Q
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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Other Label Information	For professional users only. As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Legislation and regulations	The Management of Health and Safety at Work Regulations 1999 (SI 1999 No. 3242). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895). REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents.

15.2. Chemical safety assessment

Chemical safety assessment No
performed

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3).	H271 May cause fire or explosion; strong oxidiser. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes Serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.
Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Acute tox. 4; H302 Acute tox. 4; H332 Eye Dam. 1; H318
Training advice	No particular training or education is required but the user must be familiar with this SDS. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Additional information	READY-TO-USE MIXTURE: 0,2-1% Does not require a hazard warning label.
Information which has been added, deleted or revised	Change to Sections: 1, 4, 8, 9, 10, 11, 15, 16
Prepared by	ALM