

Formula One

S35

This material and its container must be disposed of in a safe way.

2.3. Other hazards

This product does not contain any PBT or vPvB Substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

TRISODIUM NITRILOTRIACETATE	1-5%
CAS-No.: 5064-31-3	EC No.: 225-768-6
Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Carc. 2 - H351	Classification (67/548/EEC) Carc. Cat. 3;R40 Xn;R22 Xi;R36
C9-11 Alcohol 6EO	1-5%
CAS-No.: 68439-46-3	EC No.:
Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Dam. 1 - H318	Classification (67/548/EEC) Xn;R22. Xi;R41.
ALKYLAMINE DICARBOXYLATE	1-5%
CAS-No.: 90170-43-7	EC No.: 290-476-8
Classification (EC 1272/2008) Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36.
SODIUM HYDROXIDE	1-5%
CAS-No.: 1310-73-2	EC No.: 215-185-5
Classification (EC 1272/2008) Skin Corr. 1A - H314	Classification (67/548/EEC) C;R35
2-BUTOXYETHANOL	< 1%
CAS-No.: 111-76-2	EC No.: 203-905-0
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xn;R20/21/22 Xi;R36/38
3-Lauramidopropyl trimethyl ammonium methyl sulfate	< 1%
CAS-No.: 10595-49-0	EC No.: 234-204-8
Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	Classification (67/548/EEC) Xn;R22. Xi;R36. R43.

Formula One

The Full Text for all R-Phrases is Hazard Statements are Displayed in Section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation.

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

Remove victim immediately from source of exposure. Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

Skin Contact

Remove affected person from source of contamination. Remove contaminated clothing. Rinse the skin immediately with lots of water.

Use suitable lotion to moisturise skin. Get medical attention if any discomfort continues.

Eye Contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids.

Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General Information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

Coughing, chest tightness, feeling of chest pressure.

Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin Contact

Prolonged contact may cause redness, irritation and dry skin.

Eye Contact

May cause blurred vision and serious eye damage.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing Media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous Combustion Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific Hazards

The product is non-combustible. If heated, irritating vapours may be formed. Acrid smoke/fumes of : Oxides of: Carbon. Nitrogen.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

Protective Measures In Fire

Face mask, protective gloves and safety helmet. Use protective equipment appropriate for surrounding materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8.

6.2. Environmental precautions

Do not discharge onto the ground or into water courses. To prevent release, place container with damaged side up. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

Formula One

6.3. Methods and material for containment and cleaning up

Wear necessary protective equipment. Stop leak if possible without risk. Dike far ahead of larger spills for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery. Flush to sewer if local regulations permit. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Observe good chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Keep above the chemical's freezing point to avoid rupturing the container.

Storage Class

Chemical storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
2-BUTOXYETHANOL	WEL	25 ppm		50 ppm		Sk
SODIUM HYDROXIDE	WEL				2 mg/m3	

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective Equipment



Process Conditions

Provide eyewash station.

Engineering Measures

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

Respiratory Equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P3).

Hand Protection

Protective gloves should be used if there is a risk of direct contact or splash. Use protective gloves made of: Polyvinyl chloride (PVC). Rubber (natural, latex). Neoprene gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye Protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station.

Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Wash contaminated clothing before reuse. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Formula One

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Light (or pale) Straw
Odour	Mild
Solubility	Soluble in water. Miscible with water
Initial Boiling Point and Boiling Range:	~ 100 @ 760 mm Hg
Melting Point (°C)	~ 0
Relative Density	~ 1.090 (20°C)
Vapour Density (Air=1)	Not applicable.
Vapour Pressure	Not applicable.
Evaporation Rate	Not available.
pH-Value, Conc. Solution	~ 13.0
pH-Value, Diluted Solution	~ 11.0 @ 1%
Viscosity	~ 1 cSt
Decomposition Temperature (°C)	Not available.
Odour Threshold, Lower	Not available.
Odour Threshold, Upper	Not available.
Flash Point (°C)	Not applicable.
Auto Ignition Temperature (°C)	Not applicable.
Flammability Limit - Lower(%)	Not applicable.
Flammability Limit - Upper(%)	Not applicable.
Partition Coefficient (N-Octanol/Water)	Not available.
Oxidising Properties	Not applicable.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be justified for enabling proper control measures to be taken.

9.2. Other information

Volatile Organic Compound (VOC) 3 g/litre

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation
Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. The solution is strongly alkaline and reacts with strong acids with heat generation.

10.5. Incompatible materials

Materials To Avoid
Strong acids. Strong oxidising substances.

Formula One

10.6. Hazardous decomposition products

No specific hazardous decomposition products noted.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Skin Corrosion/Irritation - Animal Data

Scientifically unjustified.

Skin Corrosion/Irritation - Human Skin Model Test

Scientifically unjustified.

Skin Corrosion/Irritation - Extreme ≥ 11.5

pH

Irritating.

Classification based on Conventional Method, and In Vitro Approaches - Corrosive or Irritant by measuring pH and Acid/Alkali Reserve.

General Information

This product has low toxicity. Only large volumes may have adverse impact on human health.

Inhalation

May cause irritation to the respiratory system.

Ingestion.

May cause discomfort if swallowed.

Skin Contact

Irritating to skin. The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals after repeated contact.

Eye Contact

Risk of serious damage to eyes.

Route of entry

Ingestion. Skin and/or eye contact.

Medical Symptoms

No specific symptoms noted, but this chemical may still have adverse health impact, either in general or on certain individuals.

Medical Considerations

Skin disorders and allergies.

Name **2-BUTOXYETHANOL**

Toxic Dose 1 - LD 50 1480 mg/kg (oral rat)

Toxic Dose 2 - LD 50 220 mg/kg (ipr-rat)

Toxic Conc. - LC 50 450 ppm/4h (inh-rat)

Other Health Effects

ACGIH Carcinogen List.

Name **SODIUM HYDROXIDE**

Toxic Dose 1 - LD 50 40 mg/kg (oral-mouse)

Other Health Effects

This substance has no evidence of carcinogenic properties.

Name **TRISODIUM NITRILOTRIACETATE**

Toxic Dose 1 - LD 50 1000-2000 mg/kg (oral rat)

Toxicological Information

Nitrilotriacetic acid, trisodium salt (NTA) has caused kidney tumours in rats and mice when administered orally in high concentrations. The tumours are based on organ damage that can only occur when extremely high threshold limit concentrations, as compared with possible human exposure, are exceeded. In view of the potential degree of exposure, there should be no cancer risk to humans.

Name **C9-11 Alcohol 6EO**

Toxic Dose 1 - LD 50 2000 mg/kg (oral rat)

Toxic Conc. - LC 50 5 mg/l/4h (inh-rat)

Other Health Effects

This substance has no evidence of carcinogenic properties.

SECTION 12: ECOLOGICAL INFORMATION

Formula One

Ecotoxicity:

The product is not expected to be hazardous to the environment. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms. The product is not expected to be hazardous to waste water treatment processes. The product does not contain organic complexing agents with a DOC level of degradation of < 80% after 28 days. The product does not contain organically bound halogen.

12.1. Toxicity

Acute Toxicity - Fish

Not determined.

Acute Toxicity - Aquatic Invertebrates

Not determined.

Acute Toxicity - Aquatic Plants

Not determined.

Acute Toxicity - Microorganisms

Not determined.

Acute Toxicity - Terrestrial

Not determined.

12.2. Persistence and degradability

Degradability:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. The product is biodegradable, but it must not be discharged into drains without permission from the authorities.

12.3. Bioaccumulative potential

Bioaccumulative Potential:

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility:

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

12.6. Other adverse effects

Not applicable.

Formula One**Name 2-BUTOXYETHANOL**

LC 50, 96 Hrs, Fish mg/l 1395-1575

EC 50, 48 Hrs, Daphnia, mg/l 1815

IC 50, 72 Hrs, Algae, mg/l >500

Mobility

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

Bioaccumulative Potential

The product is not bioaccumulating.

Degradability

The product is biodegradable.

Name SODIUM HYDROXIDE

LC 50, 96 Hrs, Fish mg/l 125

Mobility

The product is soluble in water.

Bioaccumulative Potential

The product is not bioaccumulating.

Degradability

The product is biodegradable.

Name TRISODIUM NITRILOTRIACETATE

LC 50, 96 Hrs, Fish mg/l 114-470

EC 50, 48 Hrs, Daphnia, mg/l 560-1,000

IC 50, 72 Hrs, Algae, mg/l 180-320

Mobility

The product is soluble in water.

Bioaccumulative Potential

The product does not contain any substances expected to be bioaccumulating.

Degradability

The product is biodegradable.

Name C9-11 Alcohol 6EO

LC 50, 96 Hrs, Fish mg/l 10

EC 50, 48 Hrs, Daphnia, mg/l 10

IC 50, 72 Hrs, Algae, mg/l 10

Mobility

The product is soluble in water.

Bioaccumulative Potential

The product does not contain any substances expected to be bioaccumulating.

Degradability

The product is biodegradable.

Name ALKYLAMINE DICARBOXYLATE

EC 50, 48 Hrs, Daphnia, mg/l 97

Mobility

The product is soluble in water.

Bioaccumulative Potential

The product is not bioaccumulating.

Degradability

The product is biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS**General Information**

The packaging must be empty (drop-free, when inverted)

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical. Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction.

SECTION 14: TRANSPORT INFORMATION**14.1. UN number**

UN No. (ADR/RID/ADN) 1719

UN No. (IMDG) 1719

Formula One

UN No. (ICAO) 1719

14.2 UN Proper shipping name

Proper Shipping Name CAUSTIC ALKALI LIQUID N.O.S.(Sodium Nitrilotriacetate)

14.3 Transport hazard class(es)

ADR/RID/ADN Class 8
 ADR/RID/ADN Class Class 8: Corrosive substances.
 ADR Label No. 8
 IMDG Class 8
 ICAO Class/Division 8
 Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group III
 IMDG Packing group III
 ICAO Packing group III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
 No.

14.6. Special precautions for user

IMDG Code Segregation Group 18. Alkalis
 EMS F-A, S-B
 Emergency Action Code 2R
 Hazard No. (ADR) 80
 Tunnel Restriction Code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Dangerous Preparations Directive 1999/45/EC. 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.

National Regulations

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

Health And Environmental Listings

Regulation EC 689/2008 concerning the export and import of dangerous chemicals.

Water Hazard Classification

WGK 2

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

Formula One

SECTION 16: OTHER INFORMATION

General Information

Only trained personnel should use this material. This product has been manufactured under ISO 9001 and ISO 14001 Quality and Environmental Management Systems.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date 21/02/2011

Revision 3

Supersedes Date 09/02/2011

Risk Phrases In Full

R35 Causes severe burns.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R22 Harmful if swallowed.
R36/38 Irritating to eyes and skin.
R36 Irritating to eyes.
R40 Limited evidence of a carcinogenic effect.
R43 May cause sensitisation by skin contact.
R41 Risk of serious damage to eyes.

Hazard Statements In Full

H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.

Disclaimer

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 the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.