

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 1 of 10

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

1.1. Product identifier

TIP TOP SOLUTION NRX-MOD COMP. B

Art.-No.

525 5031

REACH Registration Number: 01-2120767978-27-XXXX

CAS No: 87-90-1

Index No: 613-031-00-5

EC No: 201-782-8

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

1.3. Details of the supplier of the safety data sheet

Company name: REMA TIP TOP AG

Street: Gruber Strasse 65

Place: D-85586 Poing

Telephone: +49 (0) 8121 / 707 - 100

Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone number:

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

Public Poisons Information Line: +353 (0) 1 809 2166 (8am-10pm 7 days a week)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Ox. Sol. 2; H272

Acute Tox. 4; H302

Eye Irrit. 2; H319

STOT SE 3; H335

Aquatic Acute 1; H400

Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008**Signal word:** Danger**Pictograms:****Hazard statements**

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if



Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 2 of 10

present and easy to do. Continue rinsing.

Special labelling of certain mixtures

EUH031 Contact with acids liberates toxic gas.

2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: C3 CL3 N3 O3

Molecular weight: 232,41 g/mol

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
87-90-1	symclosene			> 99 %
	201-782-8	613-031-00-5	01-2120767978-27-0000	
	Ox. Sol. 2, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H272 H302 H319 H335 H400 H410 EUH031			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
If you feel unwell, seek medical advice.
Take away from danger area and lay down affected person.

After inhalation

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
In the event of symptoms refer for medical treatment.

After contact with skin

Wash off with soap and plenty of water.
Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical treatment by eye specialist.

After ingestion

Do not induce vomiting.
Summon a doctor immediately.
Rinse out mouth and give plenty of water to drink.
Never give anything by mouth to an unconscious person.
Induce vomiting only upon the advice of a physician.

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

May intensify fire; oxidiser.
Harmful if swallowed.
Causes serious eye irritation.
May cause respiratory irritation.
Attention, beware danger of aspiration.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 3 of 10

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product does not burn, fire-extinguishing activities according to surrounding.
Foam, carbon dioxide (CO₂), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce:

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x).

Chlorine compounds

May intensify fire; oxidiser.

The product reacts with a little of water and forms highly explosive Nitrogen trichloride.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Vapours are heavier than air and spread along ground.

Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Use personal protective clothing.

Do not breathe dust.

Avoid contact with skin, eyes and clothing.

Keep away sources of ignition.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Informations for disposal look up chapter 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed.

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities



Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 4 of 10

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.
Protect from atmospheric moisture and water.

Hints on joint storage

Incompatible with:
Acids and bases
Oxidizing agents, Reducing agents
Water, organic compounds, combustible substances

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

Obey TLV for common dust, if applicable.

8.2. Exposure controls

Appropriate engineering controls

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Protective and hygiene measures

Do not inhale dust.
Wash hands before breaks and immediately after handling the product.
When using do not eat, drink or smoke.
Remove and wash contaminated clothes before re-use.

Eye/face protection

Tightly fitting goggles (EN 166).
Eye wash bottle with pure water (EN 15154).

Hand protection

In full or splash contact: Glove of nitrile rubber, layer thickness 0,11 mm, breakthrough time > 480 min.
This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.
Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (DIN EN ISO 6530)

Respiratory protection

Breathing apparatus (particle filter) only if dust is formed. (Particle filter P2)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Crystalline
Colour:	White
Odour:	Pungent

	Test method
pH-Value (at 20 °C):	2,0 - 2,7 10 g/l

Changes in the physical state

Melting point/freezing point:	225 - 230 °C Decomposition
Boiling point or initial boiling point and boiling range:	n.a.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 5 of 10

Sublimation point: n.a.
Softening point: n.d.
Flash point: > 250 °C Open cup

Flammability

Solid: n.d.
n.a.

Explosive properties

The product is not explosive.

Lower explosion limits: n.a.
Upper explosion limits: n.a.
Auto-ignition temperature: n.a.

Self-ignition temperature

Solid: n.d.
Gas: n.a.

Decomposition temperature: > 225 °C

Oxidizing properties

Oxidising solid

Vapour pressure: n.a.
(at 20 °C)Density (at 20 °C): 2,07 g/cm³Bulk density: 850 kg/m³Water solubility: 85,3 g/L
(at 20 °C)**Solubility in other solvents**

n.d.

Partition coefficient n-octanol/water: n.a.

Viscosity / dynamic: n.a.
(at 25 °C)

Viscosity / kinematic: n.a.

Flow time: n.a.

Relative vapour density: n.a.

Evaporation rate: n.a.

Solvent separation test: 0 %

Solvent content: 0 %

9.2. Other information

Solid content: 100 %

SECTION 10: Stability and reactivity**10.1. Reactivity**

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactionsReacts with:
Acids and bases



Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 6 of 10

Oxidizing agents, Reducing agents
Water, organic compounds, combustible substances

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Acids and bases
Oxidizing agents, Reducing agents
Water, organic compounds, combustible substances

10.6. Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x)
Chlorine compounds
Contact with acids liberates toxic gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed.
LD50/oral/rat: 406 m/kg
LD50/dermal/rabbit: > 2000 mg/kg [IUCLID]

Irritation and corrosivity

Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
Mutagenicity: Ames-Test: Negative
Carcinogenicity: No information available.
Teratogenicity: No information available.
Reproductive toxicity: No information available.

STOT-single exposure

May cause respiratory irritation. (symclosene)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Practical experience

Other observations

Effects of breathing high concentrations of vapour may include. Headache, dizziness, weakness, unconsciousness.
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

SECTION 12: Ecological information

12.1. Toxicity

LC50/Lepomis macrochirus/96 h = 0,2 mg/l [ECOTOX]
EC50/Daphnia magna/48 h = 0,17 mg/l [ECOTOX]
EC50/Photobacterium phosphoreum/30 min = 0,6 mg/l

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 7 of 10

Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

Hazard to waters.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Where possible recycling is preferred to disposal.
Can be incinerated, when in compliance with local regulations.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	UN 2468
<u>14.2. UN proper shipping name:</u>	TRICHLOROISOCYANURIC ACID, DRY
<u>14.3. Transport hazard class(es):</u>	5.1
<u>14.4. Packing group:</u>	II
Hazard label:	5.1



Classification code:	O2
Limited quantity:	1 kg / 30 kg
Excepted quantity:	E2
Transport category:	2
Hazard No:	50
Tunnel restriction code:	E

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 8 of 10

Inland waterways transport (ADN)

14.1. UN number: UN 2468
14.2. UN proper shipping name: TRICHLOROISOCYANURIC ACID, DRY
14.3. Transport hazard class(es): 5.1
14.4. Packing group: II
Hazard label: 5.1



Classification code: O2
Limited quantity: 1 kg / 30 kg
Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 2468
14.2. UN proper shipping name: TRICHLOROISOCYANURIC ACID, DRY
14.3. Transport hazard class(es): 5.1
14.4. Packing group: II
Hazard label: 5.1



Limited quantity: 1 kg / 30 kg
Excepted quantity: E2
EmS: F-A, S-Q

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 2468
14.2. UN proper shipping name: TRICHLOROISOCYANURIC ACID, DRY
14.3. Transport hazard class(es): 5.1
14.4. Packing group: II
Hazard label: 5.1



Limited quantity Passenger: 2.5 kg
Passenger LQ: Y544
Excepted quantity: E2
IATA-packing instructions - Passenger: 558
IATA-max. quantity - Passenger: 5 kg
IATA-packing instructions - Cargo: 562
IATA-max. quantity - Cargo: 25 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes





Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 9 of 10

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

2004/42/EC (VOC):

0 %

Information according to 2012/18/EU
(SEVESO III):

P8 OXIDISING LIQUIDS AND SOLIDS

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,3,7,11.

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

TIP TOP SOLUTION NRX-MOD COMP. B

Revision date: 20.02.2019

Product code: 00156-0481

Page 10 of 10

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH031	Contact with acids liberates toxic gas.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

"(n.a. = not applicable; n.d. = not determined)"