

XR F-6 NDT / XR F-1.5 NDT Fixer concentrate (NEW FORMULA)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 02/09/2021

Supersedes: 07/01/2016

Version: 2.0

SDS No: 0448-0003

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : XR F-6 NDT / XR F-1.5 NDT Fixer concentrate (NEW FORMULA)

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Special fixer for NDT x-ray film processors

1.3. Supplier

Manufacturer

orochemie GmbH + Co. KG
Max-Planck-Str. 27
Kornwestheim, 70806
T +49 7154 1308-0 - F +49 7154 1308-43

Supplier

Dürr NDT GmbH & Co KG
Höpfungheimer Straße 22
Bietigheim-Bissingen, 74321
T +49 (0) 7142 993810 - F +49 (0) 7142 99381 299
info@duerr-ndt.de

1.4. Emergency telephone number

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

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : XR F-6 NDT / XR F-1.5 NDT Fixer concentrate contains ammonium thiosulfate, organic acids and auxiliary agents in aqueous solution

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Name	Product identifier	%	GHS US classification
Acetic acid	CAS-No.: 64-19-7	< 5	Flam. Liq. 3, H226 Skin Corr. 1A, H314

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Take off immediately all contaminated clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.
- First-aid measures after skin contact : Wash skin with plenty of water. In the event of persistent symptoms receive medical treatment.
- First-aid measures after eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists.
- First-aid measures after ingestion : Give water to drink if victim completely conscious/alert. Do not induce vomiting. Call a doctor.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Product does not burn, fire-extinguishing activities according to surrounding. Water spray. Dry powder. Carbon dioxide.
- Unsuitable extinguishing media : high volume water jet.

5.2. Specific hazards arising from the chemical

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Store in a closed container.
Storage temperature : $\geq 5\text{ }^{\circ}\text{C}$
Information on mixed storage : Keep away from food, drink and animal feeding stuffs.
Packaging materials : Product must only be kept in the original packaging.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

Acetic acid (64-19-7)

USA - ACGIH - Occupational Exposure Limits

Local name	Acetic acid
ACGIH OEL TWA [ppm]	10 ppm
ACGIH OEL STEL [ppm]	15 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr; pulm func
Regulatory reference	ACGIH 2020

USA - OSHA - Occupational Exposure Limits

Local name	Acetic acid
OSHA PEL (TWA) [1]	25 mg/m ³
OSHA PEL (TWA) [2]	10 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Short-term exposure (Level 2: < 30 min): disposable gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.1 mm.

Long-term exposure (Level 6: < 480 min): protective gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.7 mm.

When handling with chemical substances, protective gloves must be worn with the CE -label including the four control digits. AUS/NZ: Wear impervious rubber gloves (AS2161).

Eye protection:

Protective goggles (EN 166)

Skin and body protection:

Wear suitable protective clothing

Type

Respiratory protection:

Not required for normal conditions of use

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: light yellow
Odor	: acetic acid
Odor threshold	: No data available
pH	: No data available
pH solution	: 4.6 – 5
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: Not specifically applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.2 – 1.4 g/cm ³ @ 20°C
Solubility	: Water: 100 % @ 20°C
Log Pow	: No data available
Auto-ignition temperature	: Not specifically applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Lower explosive limit (LEL): Not specifically applicable Upper explosive limit (UEL): Not specifically applicable

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Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

VOC content : ≤ 5 %
Flow Time : 20s @20°C

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Exothermic reaction with: alkalis.

10.4. Conditions to avoid

No additional information available.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified
Skin corrosion/irritation : Not classified (Specific concentration limits)
Serious eye damage/irritation : Not classified (Specific concentration limits)
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : No data available

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long -term adverse effects in the environment.

Acetic acid (64-19-7)	
LC50 fish 1	> 1000 mg/l
EC50 Daphnia 1	65 mg/l
EC50 - Other aquatic organisms [1]	> 1000 mg/l waterflea

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Acetic acid (64-19-7)	
Log Pow	-0.2

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : 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

In accordance with Verkehrsministerium / Gefahrguttransporte / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable

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DOT	TDG	IMDG	IATA
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Acetic acid (64-19-7)

CERCLA RQ	5000 lb
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15.2. International regulations

CANADA

Acetic acid (64-19-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

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National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Acetic acid(64-19-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Full text of H-phrases	
H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level

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Abbreviations and acronyms	
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.