

Deckblatt zum Sicherheitsdatenblatt

Version 1.0, 29.01.2024

Produktidentifikation:

Handelsname **Filmentwicklungskit für Fomapan R, Teil A**
Artikelnummer **FO501#**
Verwendungszweck **Vollständiger Umkehrentwicklungssatz für die Umkehrentwicklung**

Lieferant, der das Sicherheitsdatenblatt übermittelt:

Schoeni Imaging
Friedhofweg 4
CH-3303 Jeginstorf
Tel: +41 31 511 31 41
info@schoeni.swiss

Nationale Notfallnummer: **145** (24h erreichbar, Tox Info Suisse, Zürich; für Anrufe aus der Schweiz, Auskünfte auf Deutsch, Französisch und Italienisch)

Informationen für die Verwender betreffend:

Abschnitt 7

Lagerklassen
Lagerklasse: 6.1

Bei der Lagerung von giftigen Stoffen ist Folgendes zu beachten:
... Sie sind getrennt von Lebensmitteln, Futtermitteln und Heilmitteln aufzubewahren.
... Sie sind so zu lagern, dass sie für Unbefugte nicht zugänglich sind.
... Bei der Handhabung von giftigen Stoffen stehen immer der persönliche Schutz und der Schutz von anderen im Vordergrund.
... Die Schulung der Mitarbeitenden bezüglich Umgang, Handhabung, Gefahren, Sicherheits- und Notfallmassnahmen hat periodisch zu erfolgen.

Abschnitt 8

MAK-Werte

Name	CAS	MAK-Wert ml/m3	MAK-Wert mg/m3	KZG-Wert ml/m3	KZG-Wert mg/m3
1,4-Dihydroxybenzol	123-31-9		2 mg/m3 (e)		2 mg/m3 (e)

Bemerkung: Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen
Notationen:

- ... C2 / möglicherweise krebserregender Stoff
- ... M2 / möglicherweise keimzellmutagener Stoff
- ... H / Hautresorption
- ... S / Sensibilisierung

Name	CAS	MAK-Wert ml/m3	MAK-Wert mg/m3	KZG-Wert ml/m3	KZG-Wert mg/m3
Kaliumhydroxid	1310-58-3				2 mg/m3 (e)

Bemerkung: Der KZGW darf zu keiner Zeit überschritten werden

persönliche Schutzkleidung

Augenschutz

EU-Norm: EN 166

Zusätzliche Infos: Siehe SDB

Handschutz

EU-Norm: EN 374

Handschuhmaterial: Nitril, PE

Zusätzliche Infos: Siehe SDB

Abschnitt 13

Abfallentsorgung

VeVA-Code: 09 01 01 [S]

Bezeichnung: Entwickler und Aktivatorlösungen auf Wasserbasis

Entsorgungsweg: Das Produkt darf nicht zusammen mit dem Hausmüll entsorgt werden und darf nicht in die Kanalisation gelangen. Produkt und Produktereste sind als Sonderabfall zu entsorgen.

Verpackungen

VeVA-Code: 15 01 10 [S]

Bezeichnung: Verpackungen, die Rückstände von Stoffen oder von Sonderabfällen mit besonders gefährlichen Eigenschaften enthalten oder durch Stoffe oder Sonderabfälle mit besonders gefährlichen Eigenschaften verunreinigt sind.

Entsorgungsweg: Verpackungen, die Restmengen enthalten sind wie das ungebrauchte Produkt zu entsorgen. Leere Verpackungen sind als Sonderabfall zu entsorgen.

Abschnitt 15

Wassergefährdungsklasse

Klasse: A

ArGV 5. SR 822.115 Jugendarbeitsschutzverordnung

Jugendliche in der beruflichen Grundbildung dürfen nur mit diesem Produkt arbeiten, wenn dies in der jeweiligen Bildungsverordnung zur Erreichung ihres Ausbildungszieles vorgesehen ist, die Voraussetzungen des Bildungsplans erfüllt sind und die geltenden Altersbeschränkungen eingehalten werden. Jugendliche, die keine berufliche Grundbildung absolvieren, dürfen nicht mit diesem Produkt arbeiten. Als Jugendliche gelten Arbeitnehmer beider Geschlechter bis zum vollendeten 18. Altersjahr.

SR 822.111.52 Mutterschaftsverordnung

Schwangere Frauen und stillende Mütter dürfen bei ihrer Arbeit nur dann mit diesem Produkt in Kontakt kommen, wenn aufgrund einer Risikobeurteilung gemäss Art. 63 ArGV 1 feststeht, dass keine konkrete gesundheitliche Belastung für Mutter und Kind vorliegt oder diese durch geeignete Schutzmassnahmen ausgeschlossen werden kann.

Rechtsvorschriften

- ... Chemikalienverordnung, ChemV (SR 813.11)
Chemikalie der Gruppe 2 nach Anhang 5
- ... Verordnung des EDI über die erforderliche Sachkenntnis zur Abgabe bestimmter gefährlicher Stoffe und Zubereitungen (SR 813.131.21)
- ... Störfallverordnung, StFV (SR 814.012)
Mengenschwelle: 2'000kg
- ... Verordnung über die Vermeidung und die Entsorgung von Abfällen, VVEA (SR 814.600)
- ... Verordnung über den Verkehr mit Abfällen, VeVA (SR 814.610)
- ... Verordnung des UVEK über Listen zum Verkehr mit Abfällen, LVA (SR 814.610.1)
- ... Grenzwerte für die Exposition am Arbeitsplatz Suva-Nr. 1903
- ... Leitfaden für die Praxis „Lagerung gefährlicher Stoffe“
Lagerklasse 6.1

Deckblatt zum Sicherheitsdatenblatt

Version 1.0, 29.01.2024

Produktidentifikation:

Handelsname **Filmentwicklungskit für Fomapan R, Teil B1**
Artikelnummer **FO501#**
Verwendungszweck **Vollständiger Umkehrentwicklungssatz für die Umkehrentwicklung**

Lieferant, der das Sicherheitsdatenblatt übermittelt:

Schöni Imaging
Friedhofweg 4
CH-3303 Jegenstorf
Tel: +41 31 511 31 41
info@schoeni.swiss

Nationale Notfallnummer: **145** (24h erreichbar, Tox Info Suisse, Zürich; für Anrufe aus der Schweiz, Auskünfte auf Deutsch, Französisch und Italienisch)

Informationen für die Verwender betreffend:**Abschnitt 7**

Lagerklassen
Lagerklasse: 10/12

- ... Bei der Lagerung dieser Stoffe ist insbesondere darauf zu achten, dass sie weder in den Untergrund noch in Oberflächen- oder Grundwasser gelangen. Die Lager müssen mit Rückhaltemassnahmen (Auffangwannen etc.) versehen sein.
- ... Umschlag und Handhabung dürfen nicht auf unbefestigtem Terrain erfolgen, und es muss sichergestellt sein, dass keine Stoffe in die Kanalisation oder in den Boden gelangen können (Abdeckung der Ablaufschächte, Schieber in der Kanalisation oder Auffangbecken).
- ... Eine spezielle Gruppe bilden die halogenierten Kohlenwasserstoffe. Die meisten Baustoffe, vor allem Beton, sind für diese Stoffgruppe (Perchlorethylen, Chloroform, Methylenchlorid etc.) durchlässig. Aus diesem Grund muss diese Stoffgruppe in Auffangwanne aus Stahl mit 100 % Auffangvolumen gelagert werden.

Abschnitt 8**MAK-Werte**

Name	CAS	MAK-Wert ml/m3	MAK-Wert mg/m3	KZG-Wert ml/m3	KZG-Wert mg/m3
Schwefelsäure	7664-93-9		0.1 mg/m3 (e)		0.22 mg/m3 (e)

Bemerkung: Kein erhöhtes Krebsrisiko bei Einhalten des MAK-Werts
Notationen:

- ... C1#A / Bekanntermassen krebserregender Stoff mit Schwellenwert
- ... SSC / Keine Schädigung der Leibesfrucht bei Einhaltung des MAK-Werts

persönliche Schutzkleidung

Augenschutz

EU-Norm: EN 166

Zusätzliche Infos: Siehe SDB

Handschutz

EU-Norm: EN 374

Handschuhmaterial: PE

Zusätzliche Infos: Siehe SDB

Abschnitt 13

Abfallentsorgung

VeVA-Code: 09 01 05 [S]

Bezeichnung: Bleichlösungen und Bleich-Fixier-Bäder

Entsorgungsweg: Das Produkt darf nicht zusammen mit dem Hausmüll entsorgt werden und darf nicht in die Kanalisation gelangen. Produkt und Produktereste sind als Sonderabfall zu entsorgen.

Verpackungen

VeVA-Code: 15 01 10 [S]

Bezeichnung: Verpackungen, die Rückstände von Stoffen oder von Sonderabfällen mit besonders gefährlichen Eigenschaften enthalten oder durch Stoffe oder Sonderabfälle mit besonders gefährlichen Eigenschaften verunreinigt sind.

Entsorgungsweg: Verpackungen, die Restmengen enthalten sind wie das ungebrauchte Produkt zu entsorgen. Leere Verpackungen sind als Sonderabfall zu entsorgen.

Abschnitt 15

Wassergefährdungsklasse

Klasse: B

ArGV 5. SR 822.115 Jugendarbeitsschutzverordnung

Jugendliche in der beruflichen Grundbildung dürfen nur mit diesem Produkt arbeiten, wenn dies in der jeweiligen Bildungsverordnung zur Erreichung ihres Ausbildungszieles vorgesehen ist, die Voraussetzungen des Bildungsplans erfüllt sind und die geltenden Altersbeschränkungen eingehalten werden. Jugendliche, die keine berufliche Grundbildung absolvieren, dürfen nicht mit diesem Produkt arbeiten. Als Jugendliche gelten Arbeitnehmer beider Geschlechter bis zum vollendeten 18. Altersjahr.

SR 822.111.52 Mutterschaftsverordnung

Schwangere Frauen und stillende Mütter dürfen bei ihrer Arbeit nur dann mit diesem Produkt in Kontakt kommen, wenn aufgrund einer Risikobeurteilung gemäss Art. 63 ArGV 1 feststeht, dass keine konkrete gesundheitliche Belastung für Mutter und Kind vorliegt oder diese durch geeignete Schutzmassnahmen ausgeschlossen werden kann.

Rechtsvorschriften

- ... Chemikalienverordnung, ChemV (SR 813.11)
Chemikalie der Gruppe 2 nach Anhang 5
- ... Verordnung des EDI über die erforderliche Sachkenntnis zur Abgabe bestimmter gefährlicher Stoffe und Zubereitungen (SR 813.131.21)
- ... Störfallverordnung, StFV (SR 814.012)
Mengenschwelle: 20'000kg
- ... Verordnung über die Vermeidung und die Entsorgung von Abfällen, VVEA (SR 814.600)
- ... Verordnung über den Verkehr mit Abfällen, VeVA (SR 814.610)
- ... Verordnung des UVEK über Listen zum Verkehr mit Abfällen, LVA (SR 814.610.1)
- ... Grenzwerte für die Exposition am Arbeitsplatz Suva-Nr. 1903
- ... Leitfaden für die Praxis „Lagerung gefährlicher Stoffe“
Lagerklasse 10/12

Deckblatt zum Sicherheitsdatenblatt

Version 1.0, 29.01.2024

Produktidentifikation:

Handelsname	Filmentwicklungskit für Fomapan R, Teil B2
Artikelnummer	FO501#
Verwendungszweck	Vollständiger Umkehrentwicklungssatz für die Umkehrentwicklung

Lieferant, der das Sicherheitsdatenblatt übermittelt:

Schoeni Imaging
Friedhofweg 4
CH-3303 Jegenstorf
Tel: +41 31 511 31 41
info@schoeni.swiss

Nationale Notfallnummer: **145** (24h erreichbar, Tox Info Suisse, Zürich; für Anrufe aus der Schweiz, Auskünfte auf Deutsch, Französisch und Italienisch)

Informationen für die Verwender betreffend:

Abschnitt 7

Lagerklassen

Lagerklasse: 10/12

- ... Bei der Lagerung dieser Stoffe ist insbesondere darauf zu achten, dass sie weder in den Untergrund noch in Oberflächen- oder Grundwasser gelangen. Die Lager müssen mit Rückhaltemassnahmen (Auffangwannen etc.) versehen sein.
- ... Umschlag und Handhabung dürfen nicht auf unbefestigtem Terrain erfolgen, und es muss sichergestellt sein, dass keine Stoffe in die Kanalisation oder in den Boden gelangen können (Abdeckung der Ablaufschächte, Schieber in der Kanalisation oder Auffangbecken).
- ... Eine spezielle Gruppe bilden die halogenierten Kohlenwasserstoffe. Die meisten Baustoffe, vor allem Beton, sind für diese Stoffgruppe (Perchlorethylen, Chloroform, Methylenchlorid etc.) durchlässig. Aus diesem Grund muss diese Stoffgruppe in Auffangwanne aus Stahl mit 100 % Auffangvolumen gelagert werden.

Abschnitt 8

MAK-Werte

Keine schweizerischen Grenzwerte der SUVA für die Inhaltsstoffe dieses Artikels.

persönliche Schutzkleidung

Augenschutz
EU-Norm: EN 166
Zusätzliche Infos: Siehe SDB

Abschnitt 13

Abfallentsorgung

VeVA-Code: 09 01 01 [S]

Bezeichnung: Entwickler und Aktivatorenlösungen auf Wasserbasis

VeVA-Code: 20 01 17 [S]

Bezeichnung: Fotochemikalien

Entsorgungsweg: Das Produkt darf nicht zusammen mit dem Hausmüll entsorgt werden und darf nicht in die Kanalisation gelangen. Produkt und Produktereste sind als Sonderabfall zu entsorgen.

Verpackungen

VeVA-Code: 15 01 10 [S]

Bezeichnung: Verpackungen, die Rückstände von Stoffen oder von Sonderabfällen mit besonders gefährlichen Eigenschaften enthalten oder durch Stoffe oder Sonderabfälle mit besonders gefährlichen Eigenschaften verunreinigt sind.

Entsorgungsweg: Verpackungen, die Restmengen enthalten sind wie das ungebrauchte Produkt zu entsorgen. Leere Verpackungen sind als Sonderabfall zu entsorgen.

Abschnitt 15

Wassergefährdungsklasse

Klasse: A

ArGV 5. SR 822.115 Jugendarbeitsschutzverordnung

Jugendliche in der beruflichen Grundbildung dürfen nur mit diesem Produkt arbeiten, wenn dies in der jeweiligen Bildungsverordnung zur Erreichung ihres Ausbildungszieles vorgesehen ist, die Voraussetzungen des Bildungsplans erfüllt sind und die geltenden

Altersbeschränkungen eingehalten werden. Jugendliche, die keine berufliche Grundbildung absolvieren, dürfen nicht mit diesem Produkt arbeiten. Als Jugendliche gelten Arbeitnehmer beider Geschlechter bis zum vollendeten 18. Altersjahr.

Rechtsvorschriften

- ... Chemikalienverordnung, ChemV (SR 813.11)
Chemikalie der Gruppe 2 nach Anhang 5
- ... Verordnung des EDI über die erforderliche Sachkenntnis zur Abgabe bestimmter gefährlicher Stoffe und Zubereitungen (SR 813.131.21)
- ... Störfallverordnung, StFV (SR 814.012)
Mengenschwelle: 2'000kg
- ... Verordnung über die Vermeidung und die Entsorgung von Abfällen, VVEA (SR 814.600)
- ... Verordnung über den Verkehr mit Abfällen, VeVA (SR 814.610)
- ... Verordnung des UVEK über Listen zum Verkehr mit Abfällen, LVA (SR 814.610.1)
- ... Grenzwerte für die Exposition am Arbeitsplatz Suva-Nr. 1903
- ... Leitfaden für die Praxis „Lagerung gefährlicher Stoffe“
Lagerklasse 10/12

Deckblatt zum Sicherheitsdatenblatt

Version 1.0, 29.01.2024

Produktidentifikation:

Handelsname **Filmentwicklungskit für Fomapan R, Teil C**
Artikelnummer **FO501#**
Verwendungszweck **Vollständiger Umkehrentwicklungssatz für die Umkehrentwicklung**

Lieferant, der das Sicherheitsdatenblatt übermittelt:

Schoeni Imaging
Friedhofweg 4
CH-3303 Jeginstorf
Tel: +41 31 511 31 41
info@schoeni.swiss

Nationale Notfallnummer: **145** (24h erreichbar, Tox Info Suisse, Zürich; für Anrufe aus der Schweiz, Auskünfte auf Deutsch, Französisch und Italienisch)

Informationen für die Verwender betreffend:

Abschnitt 7

Lagerklassen
Lagerklasse: 8

- ... Diese Stoffe sind von den folgenden Stoffen zu separieren: Stoffe, welche mit Säuren giftige Gase bilden, brandfördernde Stoffe, Lebens-, Futter- und Heilmittel.
- ... Auffangwannen oder Überfässer müssen aus mediumbeständigem Material (spezielle Kunststoffe) sein.
- ... Säuren und Laugen reagieren miteinander unter teilweise starker Wärmeentwicklung. Sie müssen deshalb räumlich getrennt gelagert werden. Dies kann auch in demselben Brandabschnitt sein, falls vermieden werden kann, dass im Falle eines Brandes oder einer Leckage eine Vermischung stattfindet (getrennte Auffangwannen).

Abschnitt 8

MAK-Werte

Name	CAS	MAK-Wert ml/m3	MAK-Wert mg/m3	KZG-Wert ml/m3	KZG-Wert mg/m3
Natriummetabisulfit	7681-57-4		5 mg/m3 (e)		

persönliche Schutzkleidung

Augenschutz
EU-Norm: EN 166
Zusätzliche Infos: Siehe SDB

Handschutz
EU-Norm: EN 374
Handschuhmaterial: Nitril, PE
Zusätzliche Infos: Siehe SDB

Abschnitt 13

Abfallentsorgung

VeVA-Code: 09 01 05 [S]

Bezeichnung: Bleichlösungen und Bleich-Fixier-Bäder

Entsorgungsweg: Das Produkt darf nicht zusammen mit dem Hausmüll entsorgt werden und darf nicht in die Kanalisation gelangen. Produkt und Produktereste sind als Sonderabfall zu entsorgen.

Verpackungen

VeVA-Code: 15 01 10 [S]

Bezeichnung: Verpackungen, die Rückstände von Stoffen oder von Sonderabfällen mit besonders gefährlichen Eigenschaften enthalten oder durch Stoffe oder Sonderabfälle mit besonders gefährlichen Eigenschaften verunreinigt sind.

Entsorgungsweg: Verpackungen, die Restmengen enthalten sind wie das ungebrauchte Produkt zu entsorgen. Leere Verpackungen sind als Sonderabfall zu entsorgen.

Abschnitt 15

Wassergefährdungsklasse

Klasse: -

ArGV 5. SR 822.115 Jugendarbeitsschutzverordnung

Jugendliche in der beruflichen Grundbildung dürfen nur mit diesem Produkt arbeiten, wenn dies in der jeweiligen Bildungsverordnung zur Erreichung ihres Ausbildungszieles vorgesehen ist, die Voraussetzungen des Bildungsplans erfüllt sind und die geltenden Altersbeschränkungen eingehalten werden. Jugendliche, die keine berufliche Grundbildung absolvieren, dürfen nicht mit diesem Produkt arbeiten. Als Jugendliche gelten Arbeitnehmer beider Geschlechter bis zum vollendeten 18. Altersjahr.

Rechtsvorschriften

- ... Chemikalienverordnung, ChemV (SR 813.11)
Chemikalie keiner Gruppe nach Anhang 5
- ... Verordnung des EDI über die erforderliche Sachkenntnis zur Abgabe bestimmter gefährlicher Stoffe und Zubereitungen (SR 813.131.21)
- ... Störfallverordnung, StFV (SR 814.012)
Mengenschwelle: 20'000kg
- ... Verordnung über die Vermeidung und die Entsorgung von Abfällen, VVEA (SR 814.600)
- ... Verordnung über den Verkehr mit Abfällen, VeVA (SR 814.610)
- ... Verordnung des UVEK über Listen zum Verkehr mit Abfällen, LVA (SR 814.610.1)
- ... Grenzwerte für die Exposition am Arbeitsplatz Suva-Nr. 1903
- ... Leitfaden für die Praxis „Lagerung gefährlicher Stoffe“
Lagerklasse 8

Deckblatt zum Sicherheitsdatenblatt

Version 1.0, 29.01.2024

Produktidentifikation:

Handelsname **Filmentwicklungskit für Fomapan R, Teil D**
Artikelnummer **FO501#**
Verwendungszweck **Vollständiger Umkehrentwicklungssatz für die Umkehrentwicklung**

Lieferant, der das Sicherheitsdatenblatt übermittelt:

Schoeni Imaging
Friedhofweg 4
CH-3303 Jeginstorf
Tel: +41 31 511 31 41
info@schoeni.swiss

Nationale Notfallnummer: **145** (24h erreichbar, Tox Info Suisse, Zürich; für Anrufe aus der Schweiz, Auskünfte auf Deutsch, Französisch und Italienisch)

Informationen für die Verwender betreffend:

Abschnitt 7

Lagerklassen
Lagerklasse: 6.1

Bei der Lagerung von giftigen Stoffen ist Folgendes zu beachten:

- ... Sie sind getrennt von Lebensmitteln, Futtermitteln und Heilmitteln aufzubewahren.
- ... Sie sind so zu lagern, dass sie für Unbefugte nicht zugänglich sind.
- ... Bei der Handhabung von giftigen Stoffen stehen immer der persönliche Schutz und der Schutz von anderen im Vordergrund.
- ... Die Schulung der Mitarbeitenden bezüglich Umgang, Handhabung, Gefahren, Sicherheits- und Notfallmassnahmen hat periodisch zu erfolgen.

Abschnitt 8

MAK-Werte

Name	CAS	MAK-Wert ml/m3	MAK-Wert mg/m3	KZG-Wert ml/m3	KZG-Wert mg/m3
Essigsäure	64-19-7		25 mg/m3 (e)		50 mg/m3 (e)

Notationen:

- ... C1#A / Bekanntermassen krebserregender Stoff mit Schwellenwert
- ... SSC / Keine Schädigung der Leibesfrucht bei Einhaltung des MAK-Werts

persönliche Schutzkleidung

Augenschutz empfohlen gemäss EU-Norm: EN 166
Zusätzliche Infos: Siehe SDB

Handschutz
EU-Norm: EN 374
Handschuhmaterial: Nitril, PE
Zusätzliche Infos: Siehe SDB

Abschnitt 13

Abfallentsorgung

VeVA-Code: 09 01 04 [S]

Bezeichnung: Fixierbäder

Entsorgungsweg: Das Produkt darf nicht zusammen mit dem Hausmüll entsorgt werden und darf nicht in die Kanalisation gelangen. Produkt und Produktereste sind als Sonderabfall zu entsorgen.

Verpackungen

VeVA-Code: 15 01 10 [S]

Bezeichnung: Verpackungen, die Rückstände von Stoffen oder von Sonderabfällen mit besonders gefährlichen Eigenschaften enthalten oder durch Stoffe oder Sonderabfälle mit besonders gefährlichen Eigenschaften verunreinigt sind.

Entsorgungsweg: Verpackungen, die Restmengen enthalten sind wie das ungebrauchte Produkt zu entsorgen. Leere Verpackungen sind als Sonderabfall zu entsorgen.

Abschnitt 15

Wassergefährdungsklasse

Klasse: B

ArGV 5. SR 822.115 Jugendarbeitsschutzverordnung

Jugendliche in der beruflichen Grundbildung dürfen nur mit diesem Produkt arbeiten, wenn dies in der jeweiligen Bildungsverordnung zur Erreichung ihres Ausbildungszieles vorgesehen ist, die Voraussetzungen des Bildungsplans erfüllt sind und die geltenden Altersbeschränkungen eingehalten werden. Jugendliche, die keine berufliche Grundbildung absolvieren, dürfen nicht mit diesem Produkt arbeiten. Als Jugendliche gelten Arbeitnehmer beider Geschlechter bis zum vollendeten 18. Altersjahr.

SR 822.111.52 Mutterschaftsverordnung

Schwangere Frauen und stillende Mütter dürfen bei ihrer Arbeit nur dann mit diesem Produkt in Kontakt kommen, wenn aufgrund einer Risikobeurteilung gemäss Art. 63 ArGV 1 feststeht, dass keine konkrete gesundheitliche Belastung für Mutter und Kind vorliegt oder diese durch geeignete Schutzmassnahmen ausgeschlossen werden kann.

Rechtsvorschriften

- ... Chemikalienverordnung, ChemV (SR 813.11)
Chemikalie der Gruppe 2 nach Anhang 5
- ... Verordnung des EDI über die erforderliche Sachkenntnis zur Abgabe bestimmter gefährlicher Stoffe und Zubereitungen (SR 813.131.21)
- ... Störfallverordnung, StFV (SR 814.012)
Mengenschwelle: 20'000kg
- ... Verordnung über die Vermeidung und die Entsorgung von Abfällen, VVEA (SR 814.600)
- ... Verordnung über den Verkehr mit Abfällen, VeVA (SR 814.610)
- ... Verordnung des UVEK über Listen zum Verkehr mit Abfällen, LVA (SR 814.610.1)
- ... Grenzwerte für die Exposition am Arbeitsplatz Suva-Nr. 1903
- ... Leitfaden für die Praxis „Lagerung gefährlicher Stoffe“
Lagerklasse 6.1



Material Safety Data Sheet

According to Regulation No 1907/2006/EC – REACH, No. 2015/830 and No 1272/2008/EC - CLP

Date of revision: 05/19/2020

Version No: 6.2
Replaced version No: 6.1

SECTION 1	Identification of the substance/mixture and of the company/undertaking	
1.1	Product identifier	Black and white reversal film set, part A
	Other name or labelling of product:	
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Concentrate of developer for processing of Fomapan R100	
1.3	Details of the supplier of the safety data sheet	
	Supplier : Downstream User (Producer Mixture)	FOMA BOHEMIA spol. s r.o.(Ltd.) J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111
	E-mail address and phone number	ilona.spackova@foma.cz +420495733368
1.4	Emergency telephone number	EU Poison Information Centres – see section 16

SECTION 2	Hazards identification
2.1	Classification (according to Regulation No 1272/2008 – CLP)
	Carc.2;H351 Muta.2;H341 Eye Irrit.2;H319 Skin Irrit.2;H315 SkinSens.1;H317 Aquatic Acute 1;H400 Aquatic Chronic2;H411
	<u>The most important adverse physicochemical, human health and environmental effects:</u> Upon contact with the eyes can cause serious irritation. Suspected of causing cancer and genetic defects by long term exposure. .May cause an allergic skin reaction. Acute toxicity to aquatic organisms with long lasting effects.

2.2	Label elements (according to Regulation No 1272/2008/EC– CLP)
hazard pictogram	  
signal word	Warning

<i>hazard statement(s) (H- phrases)</i>	H351 H341 H315 H319 H317 H410	Suspected of causing cancer Suspected of causing genetic defects Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction Very toxic to aquatic life with long lasting effects
<i>precautionary statement (P- phrases)</i>	P102 P262 P305+P351+P338 P308+P313 P273 P501	Keep out of reach of children Do not get in eyes, on skin, or on clothing. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing IF exposed or concerned: Get medical advice/attention. Avoid release to the environment Dispose of contents/container to collecting place for dangerous waste in accordance with national regulations.
		Contain: hydroquinone, potassium hydroxide

2.3	Other hazards
	The substance does not belong to the category of PBT, vPvB

SECTION 3		Composition/information on ingredients				
3.1		Substances -irrelevant				
3.2		Mixtures				
Folder name	Registration number	Index number	CAS number	ES number	Content % in the solution	Classification
Potassium carbonate	01-2119532646-36-xxxx	Not available	584-06-7	209-529-3	< 8	Eye Irrit.2;H319 Skin Irrit.2;H315 STOT SE 3;H335
Hydroquinone	01-2119524016-51-xxxx	604-005-00-4	123-31-9	204-617-8	< 3	Carc.2;H351 Muta.2;H341 AcuteTox.4;H302 EyeDam.1;H318 Skin Sens.1;H317 Aquatic Acute1;H400, M(acute)=10 Aquatic Chronic1;H410
Potassium bromide	01-2119962195-33-xxxx	Not available	7758-02-3	231-830-3	< 2	Eye Irrit2;H319
Potassium hydroxide	01-2119487136-33	019-002-00-8	1310-58-3	215-181-3	< 1	SkinCorr.1A;H314 AcuteTox.4;H302 Met.Corr.1;H290
4-(Hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one) (Dimezone S)	Not available	Not available	13047-13-7	235-920-3	< 0,2	Acute Tox 4;H302 Skin Sens.1;H317

Solution

(Full text H-phrases... section 16)

SECTION 4	First aid measures
4.1	Description of first aid measures
	Lead the disabled person from the contaminated area, bring him/her into a state of peace and facilitate breathing by loosening clothing, watch, and if necessary maintain its vital functions. If you are experiencing symptoms of acute injury (shortness of breath, persistent cough, chest pain, nausea, impaired sensory perception, fainting, etc.), call a physician or transport the injured person to a doctor.
	After contact with skin: Wash affected area thoroughly with water.
	Eye Contact: Remove any contact lenses and wash eyes with plenty of water as soon as possible. If necessary, use force to open tightly closed eyelids. Take care not to rinse contaminated water into the non-affected eye. Do not neutralize. Seek medical help.
	Exposure by inhalation: Remove patient to fresh air, rinse eyes, mouth and nasal cavity with lukewarm water.
	Ingestion: Calm affected person, rinse his mouth with clean water. Force the affected person to drink a glass of cold water (about 0,4 dl). Do not induce vomiting. If affected person vomit spontaneously, control to prevent inhalation of vomit. Do not administer either activated charcoal or neutralizing agent. Call a physician or transport the affected person to a doctor.
4.2	Most important symptoms and effects, both acute and delayed
	Not known
4.3	Indication of any immediate medical attention and special treatment needed
	In the workplace, running water and soap.

SECTION 5	Firefighting measures
5.1	Extinguishing media
	The product (liquid) is not flammable. Extinguishing agents must be adapted to burning substances in surrounding.
	Inappropriate extinguishing media: N.a.
5.2	Special hazards arising from the substance or mixture
	At elevated temperatures or by contact with acid can release sulphur dioxide
5.3	Advice for firefighters: Breathing apparatus, workwear

SECTION 6	Accidental release measures
6.1	Personal precautions, protective equipment and emergency procedures
	Take persons not participating in removing the consequences of the accident out of reach. Ventilate enclosed spaces. Use the prescribed personal protective equipment when removing the consequences of the accident. Use breathing apparatus and complete protective suit when working on the disposal of the accident. Smoking and manipulation with open fire is prohibited.
6.2	Environmental precautions
	Do not allow substance to enter soil, sewage system, surface and groundwater.
6.3	Methods and material for containment and cleaning up
	Let soak it to inert absorption products. Rinse the affected area thoroughly with water. Small leak strongly dilute with water.

6.4	Reference to other sections
	See section 13

SECTION 7	Handling and storage
7.1	Precautions for safe handling
	Follow the safety rules while working. Wear recommended personal protective equipment. Avoid contact with eyes. Eating, drinking, smoking, working with burning materials and open fire is prohibited while working. Equipment must contain fire extinguishers in enclosed areas, ventilation must be ensured naturally or mechanically in enclosed spaces. Workplaces must be kept clean and escape routes must remain free.
7.2	Conditions for safe storage, including any incompatibilities
	Store in original containers in a cool, dry and well ventilated place. Containers should be stored separately from food. The working solution must be prepared according to the instructions.
7.3	Specific end use(s)
	See in 1.2. , Other uses – not available

SECTION 8	Exposure controls/personal protection				
8.1	Control parameters				
	International limit values for chemical agents (Occupational exposure limits, OELs):				
	Hydroquinone	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
	Australia		2		
	Austria		2 inhalable aerosol		4 inhalable aerosol
	Belgium		2		
	Canada - Ontario		1		
	Canada - Québec		2		
	Denmark		2		2
	Finland		0,5		2 (1)
	France		2		
	Ireland		0,5		
	People's Republic of China		1		2 (1)
	Poland		1		2
	Romania		1		2 (1)
	Singapore		2		
	South Korea		2		
	Spain		2		
	Sweden		0,5		1,5 (1)
	Switzerland		2 inhalable aerosol		2 inhalable aerosol
	USA - NIOSH				2 (1)
	USA - OSHA		2		
	United Kingdom		0,5		
		Remarks			
	Finland	(1) 15 minutes average value			
	People's Republic of China	(1) 15 minutes average value			
	Romania	(1) 15 minutes average value			
	Spain	sen			
	Sweden	(1) 15 minutes average value			

USA - NIOSH	(1) Ceiling limit value (15 min)			
Potassium hydroxide	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Australia				2 (1)
Austria		2 inhalable aerosol		
Belgium				2
Canada - Ontario				2 (1)
Canada - Québec				2 (1)
Denmark		2		2
Finland				2 (1)
France				2
Hungary		2		2
Ireland				2 (1)
Japan - JSOH		2 (1)		
New Zealand				2 (1)
People's Republic of China				2 (1)
Poland		0,5		1
Singapore				2
South Korea				2 (1)
Spain		2		
Sweden		1		2 (1)
Switzerland		2 inhalable aerosol		
USA - NIOSH				2 (1)
United Kingdom				2
	Remarks			
Australia	(1) Ceiling limit value			
Canada - Ontario	(1) Ceiling limit value			
Canada - Québec	(1) Ceiling limit value			
Finland	(1) Ceiling limit value			
Ireland	15 minutes reference period			
Japan - JSOH	(1) Occupational exposure limit ceiling: Reference value to the maximal exposure concentration of the substance during a working day			
New Zealand	(1) Ceiling limit value			
People's Republic of China	(1) Ceiling limit value			
South Korea	(1) Ceiling limit value			
Sweden	(1) 15 minutes average value			
USA - NIOSH	(1) Ceiling limit value			
Potassium carbonate	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Latvia	2	0,5		
Potassium bromide-International limit values for chemical agents (Occupational exposure limits, OELs) – not available				
Dimezon S- 4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidinone				
International limit values for chemical agents (Occupational exposure limits, OELs) – not available				
Laying down limit values of biological exposure tests: not available				

Hydroquinone

DNELs:

	Workers		Consumers	
Route of exposure	Chronic effects local	Chronic effects systemic	Chronic effects local	Chronic effects systemic
Inhalation	1 mg/m ³	7 mg/m ³	0,5mg/m ³	1,74 mg/m ³
Dermal	Not available	128 mg/kg bw/day	Not available	64 mg/kg bw/day

PNECs

Environmental protection target	PNEC
Fresh water	0.114µg/L
Intermittent release	1.34 µg/L
Freshwater sediments	0.98 µg/kg sediment dw
Marine water	0.0114 mg/L
Marine sediments	0.097 µg /kg sediment dw
Microorganisms in sewage treatment	0.71mg/L*
Soil (agricultural)	0.64 µg/kg sediment dw*

*source : substance Brief Profile: <http://echa.europa.eu/>

Potassium carbonate

DNELs:

	Workers	Consumers
Route of exposure	Chronic effects local	Chronic effects local
Inhalation	10 mg/m ³	10 mg/m ³
Dermal	16 mg/cm ²	8 mg/cm ²

PNECs - Not available

Potassium hydroxide

DNELs:

	Workers	Consumers
Route of exposure	Chronic effects local	Chronic effects local
Inhalation	1 mg/m ³	1 mg/m ³

PNECs - Not available

Dimezone S - 1-phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidinone

DNELs, PNECs- not available

Potassium bromide

DNELs

	Consumers
Route of exposure	Chronic effects systemic
Inhalation	6.9x10 ⁻⁹ mg/m ³
Dermal	1.4 mg/kg bw/day

PNECs

Environmental protection target	PNEC
Fresh water	0.0147 mg/L
Freshwater sediments	0.67mg/kg sediment dw
Marine water	0.0015 mg/L
Microorganisms in sewage treatment	0.002mg/L
Soil (agricultural)	0.08 mg/kg sediment dw

8.2	Exposure controls
	Individual protection measures, incl. protective equipment
	Technical measures: Working place must be equipped with a local suction and a source of running water if the eyes irrigation and washing of hands or affected parts of skin is needed. Tightly closed containers and equipment, natural and mechanical ventilation. Avoid contact with eyes and mouth, avoid inhalation and skin staining. Eating, drinking and smoking is prohibited while working. Avoid contact with food substances and drinks. After work wash hands with soap and water. Take off polluted clothes if needed.
	Respiratory protection: During normal handling is not required.
	Hand protection: Use rubber (PE, nitril) gloves
	Eye protection: Safety glasses
	Skin protection: Workwear

	Environmental exposure: Secure the spaces against the leakage into watercourses, soil and sewage system.
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SECTION 9	Physical and chemical properties	
9.1	Information on basic physical and chemical properties	
	Appearance	Moderate yellow liquid
	Odour	Moderate, nonspecific
	pH	about 10.2-10.5
	Melting point/freezing point	about 0 °C
	Initial boiling point and boiling range	about 100 °C
	Flash point	Fireproof
	Evaporation rate	N.a.
	Flammability	Incombustible
	Upper/lower flammability or explosive limits	Irrelevant
	Vapour pressure	<20 mbar
	Vapour density	Unknown
	Oxidising properties	No
	Relative density	1.24.-1,25 g/cm ³
	Solubility – water	Solution
	Partition coefficient: n-octanol/water	Unknown
	Auto-ignition temperature	Irrelevant
	Decomposition temperature	N.a.
	Viscosity;	N.a.
	Explosive properties	No
9.2	Other information	
	Fat solubility	N.a.
	Conductivity	N.a.

SECTION 10	Stability and reactivity	
10.1	Reactivity	
	Under normal conditions the product is stable	
10.2	Chemical stability	
	Under normal conditions the product is stable	
10.3	Possibility of hazardous reactions	
	Not known	

10.4	Conditions to avoid
	High temperature
10.5	Incompatible materials
	Aluminium, strong mineral acids
10.6	Hazardous Decomposition Products
	Possible development of sulphur dioxide at elevated temperatures and reaction with acids

SECTION 11	Toxicological information
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11.1	Information on toxicological effects
Acute toxicity	ATE_{mix} (oral)=7970 mg/kg (calculation)- Based on available data, the criteria for this classification are not match up Hydroquinone LD50/ oral/ rat : > 375 mg/kg LD50/ dermal/ rabbit : > 2000 mg/kg Potassium carbonate LD50 /oral/rat: >2000 mg/kg bw LD50 /dermal/rabbit: >2000 mg/kg bw LC50 /inhal/ rat/4.5 hr: >4.96 mg/L air (Dust) Potassium hydroxide LD50/ oral/ rat : 273 mg/kg Potassium bromide LD50 / oral /rat : >2000 mg/kg LD50 / dermal/ rabbit: >2000 mg/kg Dimezone S- (4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidone) LD50/oral/rat: 566 mg/kg bw
Skin corrosion/irritation	Causes serious skin irritation Potassium hydroxide: Dermal irritation/ rabbit: 50 mg/day – strong irritant
Serious eye damage/eye irritation	Causes serious eye irritation Potassium hydroxide: Eye irritation/ rabbit: 1mg/day (rinsed with water)- moderate irritant
Respiratory or skin sensitisation	May cause an allergic skin reaction
Germ cell mutagenicity	Suspected of causing genetic defects
Carcinogenicity	Suspected of causing cancer
Reproductive toxicity	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — single exposure	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — repeated exposure	Based on available data, the criteria for this classification are not match up
Aspiration hazard	Based on available data, the criteria for this classification are not match up
<u>Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:</u>	
Toxicity oral. (ingestion / swallowing):	
Ingestion may cause irritation or burns to the digestive tract. It causes nausea.	
Toxicity inhal. (inhalation):	

The product (solution) is not dangerous.
Toxicity dermal.
May cause irritation (redness) of skin
Eye Contact:
Causes serious eye irritation
Immediate, delayed and chronic effects of short and long term exposure:
Suspected of causing cancer and genetic defects

SECTION	Ecological information
12	
12.1	Toxicity
	Mixture is very toxic to aquatic life with long lasting effects Hydroquinone LC50(fish)/96hr: 0.638 mg/L EC50(daphnia)/48hr: 0.134 mg/L EC50(water algae)/72hr: 0.33 mg/L NOEC(daphnia) /21d:0.0057mg/L NOEC(algae)/72 hr.: 0.019 mg/L Potassium hydroxide LD50, fish/96 hr: 10-10 mg/L Mortality concentration for fish:: 28.6 mg/24 hr EC50(invertebrates -Daphnia sp)/24 hr: 270 mg/L Harmful effect –pH The danger for water: class1 Potassium carbonate Toxicity for fish LC50 (Oncorhynchus mykiss)/96 hr: 68 mg/L; NOEC (Oncorhynchus mykiss)/96 hr: 33 mg/L Toxicity for invertebrates EC50 (Daphnia Pulex)/48 hr: 200 mg/l ; NOEC (Daphnia Pulex)/48 hr: 120 mg Toxicity for algae- not available Potassium bromide* LC50, freshwater fish/96 hr : >440 mg/L EC50, marine algae/72 hr: >440 mg/L EC50, freshwater microorganisms/3 hr: >1g/L *source: http://echa.europa.eu/ - Brief profile Dimezone S - (4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidone) LC50/fish:1-10 mg/L
12.2	Persistence and degradability
	Hydroquinone is considered to be biologically degradable (test OECD 301 C)
12.3	Bioaccumulative potential
	It is not expected
12.4	Mobility in soil
	N.a., the product is soluble in water
12.5	Results of PBT and vPvB assessment
	Not available. Substances are not identified as a PBT or vPvB
12.6	Other adverse effects

	WGK = 1
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SECTION 13	Disposal considerations	
13.1	Waste treatment methods	
	Code and type of waste	09 01 01* – aqueous developer solutions 15 01 10 * - packaging containing residues of hazardous substances
	The recommended method of disposal of the substance/ preparation:	Spilled product let absorb in inert absorbent material and pass it on to a person who is in charge of its removal. The product cannot be removed together with local or other waste. Do not wash away into sewers.
	The recommended method of disposal of contaminated product packaging:	Emptied containers (after thorough flushing) can be reused, or put away into a container, designated for separate collection (plastics). Possible slight residuals of hydroquinone in the empty, rinsed container, transform into harmless chinone form. (oxidation process)
	Waste legislation	Directive No. 2008/98/ES

SECTION 14	Transport information	
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Land transport ADR/RID (cross- border), Maritime transport IMDG, Air transport ICAO-TI and IATA-DGR:

14.1	UN number	3082
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HYDROQUINONE)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
	Labels	9 
14.5	Environmental hazard	Product contains environmentally hazardous substances: (Hydroquinone). Mixture is environmentally hazardous according to the criteria of the UN Model Regulations- see to section 12
	Marine pollutant	Yes
14.6	Special precautions for user	See to section 8- Avoid release to the environment
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not expected

Special provisions, remarks:	ADR: The product is carried in single or combination packaging containing a net quantity per single or inner packaging of 5 litres or less and is not subject to any other provisions of ADR provided packaging meet the general provisions of 4.1.1.1., 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (according to chapter 3.3 ADR, special provisions 375) IMDG: The product is packaged in single or combination packaging containing a net quantity per single or inner packaging of 5 litres or less and is not subject to any other provisions of IMDG Code relevant to marine pollutants provided the packaging meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. (according to Chapter 2.10, paragraphs 2.10.2.7 and 2.10.2.3) ICAO/IATA: The product is transported in single or combination packaging containing a net quantity per single or inner packaging of 5 litres or less and is not subject to any other provisions of the IATA Dangerous Goods Regulations provided the packaging used defined standards. (according to part 4.4 , Special provisions A197)
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SECTION 15	Regulatory information
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture
	Regulation (EC) No 1907/2006, registration, evaluation, authorisation, restriction chemicals (REACH) Regulation (EC) No 2015/830, Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures Decree No. 381/2001 Coll. Establishing the Waste Catalogue. Government Regulation No. 361/2007 Coll. On the health conditions of workers at work European Agreement concerning the international carriage of dangerous goods (ADR) International Maritime Dangerous Goods Code (IMDG Code) IATA Dangerous Goods Regulations (DGR)
15.2	Chemical safety assessment
	The chemical safety assessment for the product was not made.

SECTION 16	Other information
Abbreviations, symbols	
Carc.2	Carcinogenicity (Category 2)
Muta.2	Mutagenicity (Category 2)
Eye Dam.1	Serious eye damage (Category 1)
Skin Corr. 1A	Skin corrosion
Skin Irrit.2	Skin irritation (Category 2)
Skin Sens.1	Skin sensitisation (Category 1)
Acute Tox.4	Hazardous to the aquatic environment, acute (Category 4)
Eye Irrit.2	Serious eye irritation (Cat. 2)
Aquatic Acute 1	Hazardous to the aquatic environment, acute (Category 1)
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic (Category 1)

Aquatic Chronic 2	Hazardous to the aquatic environment, chronic (Category 2)
STOT SE 3	Specific target organ toxicity – Single exposure (Category 3)
CLP : Regulation (EC) č.1272/2008 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals SVHC: Substance of very high concerns PBT: Persistent, bioaccumulative and toxic vPvB :(very) Persistent, (very) Bioaccumulative RID: Regulations Concerning the International Transport of Dangerous Goods by Rail ICAO: International Civil Aviation Organisation ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level PNEC: Predicted No-Effect Concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent EC50: Median Effective Concentration LOAEL: Lowest observed adverse effect level NOAEL: No Observed Adverse Effect Level NOEC: No Observed Effect Concentration M: multiplier factor bw: body weight	

Materials used for the processing of safety data sheet	
Information provided by the producer- Material Safety Data Sheets (MSDS) for chemical substances, GESTIS database (www.gdudv.de), European Chemicals Agency http://echa.europa.eu/	
Classification (according to Regulation No 1272/2008 – CLP): calculation method	
H-phrases :	
H351	Suspected of causing cancer
H341	Suspected of causing genetic defects
H302	Harmful if swallowed
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage.
H400	Very toxic to aquatic life
H335	May cause respiratory irritation
H315	Causes skin irritation.
H314	Causes severe skin burns and eye damage
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
Guidance regarding the training of workers:	
Workers coming into contact with hazardous chemicals or products must have access to data which are presented in this MSDS and be familiar with them clearly. Person transporting hazardous chemicals and preparations must be familiar with guidelines for emergency response in accordance with regulations on hazardous goods within the meaning of ADR / RID. The information contained in this MSDS are currently valid data and best practices for use and handling of this substance under normal conditions. Any other use or handling of this mixture which is not consistent with those of MSDS excludes the responsibility for defects, more precisely for damage for which the producer, importer or retailer would be otherwise responsible.	

EU Poison Information Centres

Country	Poison Centre	Tel number 24hour every day/ other time
Austria	Poison Information Center/Vergiftungsinformationszentrale	+ 43 1 406 43 43
Belgium	Cente Antipoisons-Antigifcentrum center	+32 70 245 245
Bulgaria	National Toxicology Information center- Hospital for Active Medical Treatment and Emergency Medicine 'N.I.Pirigov', Sofia	+359 2 9154 409
Croatia	Poison Information Center/ Centar za kontrolu otrovanja	+385 1 2348 342
Denmark	Poison Center Hotline	+45 82 12 12 12
Estonia	Poisoning centre Hotline Mürgistusinfo	+372 16662
Finland	Poison Information Centre	+358 9 471977
France	Centre Antipoison et de Toxicovigilance de Paris	+33 1 40 05 48 48
Germany	Poison Information Centre in Berlin	+49 30 192 40
Greece	Poison Information Centre	+30 2107793777
Iceland	Poisons Information Center (Eitrunarmiðstöð)	+354 543 2222
Ireland	National Poisons Information Centre	+353 1 809 2566
Hungary	Poison Information Service (National Institute for chemical safety) Információs szolgálat akut mérgezés eséén)	+36 80 201 199
Italy	Poisons Center CAV-Centro Antiveneni Roma	+39 06 68593726, +39 06 3054343, +39 06 49978000
Latvia	Toksikoloģijas un sepses klīnikas Saindēšanās un zāļu informācijas centrs	+371 67042473
Lithuania	Poison Information Bureau -PIB	+370 8-5 236 20 52
Luxembourg	Belgian Poison Center	+352 8002 5500
Netherlands	National Poisons Information Center (nationaal vergiftigingen Informatie centrum,NVIC)	+031 (0) 30 274 8888
Norway	Poison center (Giftinformasjonen)	+47 22 59 13 00
Poland	National Poisons Information Centre Lodz	+48 42 63 14 724
Portugal	Centro de Informação Antivenenos	+351 808 250 143
Romania	National Institute for Public Health (Centrum National de Informare Toxicologica)	+40 21 318 36 06

Country	Poison Centre	Tel number 24hour every day/ other time
Slovakia	National Toxicological Information Centre (Národné toxikologické informačné centrum)	+421 2 54 774 166
Spain	Toxicological Information Service (Servicio de Información toxicologica)	+34 91 562 04 20
Sweden	Giftinformationscentralen (Swedish poisons Information Centre)	112/ mon-fri 9.00-17.00 +46 10 456 6700
Switzerland	The Swiss Toxicological Information Centre (STIC)	145
United Kingdom	National Poisons Information Service -NPIS(Birmingham)	England, Wales, Scotland 111
Turkey	Toxicolog Department and Poisons Centre	+ 90 0312 433 7001,+90 0800 314 7900

Revised safety data sheet:

Revision:

Version 6.2 – change in sections: 3.2 – added substance Dimezon S (changed clasissification of this substance)



Material Safety Data Sheet

According to Regulation No 1907/2006/EC – REACH, No. 2015/830 and No 1272/2008/EC - CLP

Date of revision : 02/16/2016

Version No: 5.0
Replaced version No: 4.0

SECTION 1	Identification of the substance/mixture and of the company/undertaking	
1.1	Product identifier	Black and white reversal film set, part B₁
	Other name or labelling of product:	
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Concentrate of bleaching bath for processing of black and white reversal film Fomapan R100	
1.3	Details of the supplier of the safety data sheet	
	Supplier : Downstream User (Producer Mixture)	FOMA BOHEMIA spol. s r.o.(Ltd.) J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111
	E-mail address and phone number	ilona.spackova@foma.cz +420495733368
1.4	Emergency telephone number (Czech)	Toxicologic institute (TIS) Na Bojišti 1, 128 21 Praha 2 Tel. 224919293, 224915402 (continuous telephone information service)

SECTION 2	Hazards identification	
2.1	Classification (according to Regulation No 1272/2008 – CLP)	
	Eye.Irrit.2;H319 Skin Irrit.2;H315	
	<u>The most important adverse physicochemical, human health and environmental effects:</u> May cause serious eye irritation and skin irritation.	

2.2	Label elements (according to Regulation No 1272/2008/EC– CLP)	
Identification of product	Black and white reversal film set, part B₁	
hazard pictogram		
signal word	Warning	

<i>hazard statement(s) (H-phrases)</i>	H319 H315	Causes serious eye irritation. Causes skin irritation
<i>precautionary statement (P-phrases)</i>	P102 P305+P351+P338 P302+ P352	Keep out of reach of children. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water/soap.
		Contain: Sulphuric acid
		FOMA BOHEMIA spol. s r.o., J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111

2.3	Other hazards
	The substance does not belong to the category of PBT, vPvB, SVHC

SECTION 3	Composition/information on ingredients					
3.2	Mixtures					
Folder name	Registration number	Index number	CAS number	ES number	Content % in the solution	Classification
Sulphuric acid	01-2119458838-20-0000	016-020-00-8	7664-93-9	231-639-5	< 15	SkinCorr.1A;H314

Solution

(Full text H-phrases... section 16)

SECTION 4	First aid measures
4.1	Description of first aid measures
	Lead the disabled person from the contaminated area, bring him/her into a state of peace and facilitate breathing by loosening clothing, watch, and if necessary maintain its vital functions. If you are experiencing symptoms of acute injury (shortness of breath, persistent cough, chest pain, nausea, impaired sensory perception, fainting, etc.), call a physician or transport the injured person to a doctor.
	After contact with skin: Wash affected area thoroughly with water.
	Eye Contact: Remove any contact lenses and wash eyes with plenty of water as soon as possible. If necessary, use force to open tightly closed eyelids. Take care not to rinse contaminated water into the non-affected eye. Do not neutralize. Seek medical help.
	Exposure by inhalation: Remove patient to fresh air, rinse eyes, mouth and nasal cavity with lukewarm water.
	Ingestion: Calm affected person, rinse his mouth with clean water. Force the affected person to drink a glass of cold water (cca 0,4 dl). Do not induce vomiting. If affected person vomit spontaneously, control to prevent inhalation of vomit. Do not administer either activated charcoal or neutralizing agent. Call a physician or transport the affected person to a doctor.
4.2	Most important symptoms and effects, both acute and delayed
	Not known

4.3	Indication of any immediate medical attention and special treatment needed
	In the workplace, running water and soap.

SECTION 5	Firefighting measures
5.1	Extinguishing media
	The product (liquid) is not flammable. Extinguishing agents must be adapted to burning substances in surrounding.
	Inappropriate extinguishing media: water
5.2	Special hazards arising from the substance or mixture
	At elevated temperatures or by contact with acid can release sulphur dioxide
5.3	Advice for firefighters: Breathing apparatus, workwear

SECTION 6	Accidental release measures
6.1	Personal precautions, protective equipment and emergency procedures
	Take persons not participating in removing the consequences of the accident out of reach. Ventilate enclosed spaces. Use the prescribed personal protective equipment when removing the consequences of the accident. Use breathing apparatus and complete protective suit when working on the disposal of the accident. Smoking and manipulation with open fire is prohibited.
6.2	Environmental precautions
	Do not allow substance to enter soil, sewage system, surface and groundwater.
6.3	Methods and material for containment and cleaning up
	Let soak it to inert absorption products. Rinse the affected area thoroughly with water. Small leak strongly dilute with water.
6.4	Reference to other sections
	See section 13

SECTION 7	Handling and storage
7.1	Precautions for safe handling
	Follow the safety rules while working. Wear recommended personal protective equipment. Avoid contact with eyes. Eating, drinking, smoking, working with burning materials and open fire is prohibited while working. Equipment must contain fire extinguishers in enclosed areas, ventilation must be ensured naturally or mechanically in enclosed spaces. Workplaces must be kept clean and escape routes must remain free.
7.2	Conditions for safe storage, including any incompatibilities
	Store in original containers in a cool, dry and well ventilated place. Containers should be stored separately from food. The working solution must be prepared according to the instructions.
7.3	Specific end use(s)
	See in 1.2. , Other uses – not available

SECTION 8	Exposure controls/personal protection		
8.1	Control parameters		
	Government Regulation No 361/2007 Coll. - Conditions for health workers at work and occupational exposure limits in the air of workplaces and ways of measuring and evaluating. (Czech) <i>sulphuric acid</i> (as SO₃): PEL 1 mg/m³ NPK-P 2 mg/m³ Substance is not listed in Notice. No.432/2003 Coll., Laying down limit values of biological exposure tests: not available		
	DNEL : (<i>sulphuric acid</i>) Short-Term – inhal., local. effect Long-Term – inhal., local. effect PNEC : Freshwater Marine water Sediment in freshwater Sediment in marine water Microorganisms in Sewage Treatment Plant (STP)	Workers 0.1 mg/m³ 0.05 mg/m³ 0.0025 mg/l 0.00025 mg/l 0.002 mg/kg sediment dw 0.002 mg/kg sediment dw 8.8 mg/	General
8.2	Exposure controls		
	Individual protection measures, incl. protective equipment		
	Technical measures: Working place must be equipped with a local suction and a source of running water if the eyes irrigation and washing of hands or affected parts of skin is needed. Tightly closed containers and equipment, natural and mechanical ventilation. Avoid contact with eyes and mouth, avoid inhalation and skin staining. Eating, drinking and smoking is prohibited while working. Avoid contact with food substances and drinks. After work wash hands with soap and water. Take off polluted clothes if needed.		
	Respiratory protection: During normal handling is not required. In sensitive people (due to possible respiratory irritation) is recommended respirator use.		
	Hand protection: Use rubber (PE) gloves		
	Eye protection: Safety glasses		
	Skin protection: Workwear		
	Environmental exposure: Secure the spaces against the leakage into watercourses, soil and sewage system.		

SECTION 9	Physical and chemical properties	
9.1	Information on basic physical and chemical properties	
	Appearance	Colourless liquid
	Odour	nonspecific
	pH	1-3
	Melting point/freezing point	about 0 °C
	Initial boiling point and boiling range	about 100 °C
	Flash point	Fireproof
	Evaporation rate	N.a.
	Flammability	Incombustible
	Upper/lower flammability or explosive limits	Irrelevant

	Vapour pressure	<20 mbar
	Vapour density	Unknown
	Oxidising properties	No
	Relative density	1.24-1.25 g/cm ³
	Solubility – water	Solution
	Partition coefficient: n-octanol/water	Unknown
	Auto-ignition temperature	Irrelevant
	Decomposition temperature	N.a.
	Viscosity;	N.a.
	Explosive properties	No
9.2	Other information	
	Fat solubility	N.a.
	Conductivity	N.a.

SECTION 10	Stability and reactivity
10.1	Reactivity
	Under normal conditions the product is stable
10.2	Chemical stability
	Under normal conditions the product is stable
10.3	Possibility of hazardous reactions
	Reactions with metals, the possibility of hydrogen
10.4	Conditions to avoid
	High temperature. During the dilution Is necessary pour the product into water, not reversely!
10.5	Incompatible materials
	Iron, light metals, strong bases
10.6	Hazardous Decomposition Products
	Not available

SECTION 11	Toxicological information
11.1	Information on toxicological effects
Acute toxicity	Based on available data, the criteria for this classification are not match up
Skin corrosion/irritation	Causes serious skin irritation
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	Based on available data, the criteria for this classification are not match up
Germ cell mutagenicity	Based on available data, the criteria for this classification are not match up

Carcinogenicity	Based on available data, the criteria for this classification are not match up
Reproductive toxicity	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — single exposure	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — repeated exposure	Based on available data, the criteria for this classification are not match up
Aspiration hazard	Based on available data, the criteria for this classification are not match up
<i>Sulphuric acid</i> Acute toxicity LD ₅₀ , oral, rat = 2140 mg/kg LC ₅₀ , inhal.,rat(2h) = 375 mg/m ³ LC ₅₀ , inhal., mouse(4h/8h) = 0.85 mg/l / 0,6 mg/l NOAEC, inhal = 19.3 mg/m ³	
<u>Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:</u>	
Toxicity oral. (ingestion / swallowing): Ingestion may cause strong burning of the digestive tract.	
Toxicity inhal. (inhalation): The product (steams) causes respiratory system irritation.	
Toxicity dermal. Causes skin irritation.	
Eye Contact: Causes serious eye irritation.	
Immediate, delayed and chronic effects of short and long term exposure: N.a.	

SECTION	Ecological information
12	
12.1	Toxicity
	Sulphuric acid is strong mineral acid, do to low pH has harmful local effect to aquatic organism Toxicity for fish: LC ₅₀ , 96 h., <i>Lepomis macrochirus</i> = 16 - 28 mg/l Toxicity for invertebrate: LC ₅₀ , 48 h., <i>Daphnia magna</i> > 100 mg/l Toxicity for algae: IC ₅₀ , 72 h., <i>Desmodesmus subspicatus</i> > 100 mg/l EC10/LC10 or NOEC, waterfresh fish = 0.025 mg/l EC10/LC10 or NOEC, invertebrate = 0.15 mg/l
12.2	Persistence and degradability
	Inorganic substances .
12.3	Bioaccumulative potential
	It is not expected
12.4	Mobility in soil
	N.a., the product is soluble in water
12.5	Results of PBT and vPvB assessment
	Not available. Substances are not identified as a PBT or vPvB

12.6	Other adverse effects
	WGK = 1

SECTION 13	Disposal considerations	
13.1	Waste treatment methods	
	Code and type of waste	09 01 05* – bleaching solutions and solutions of bleaching fixers 15 01 10 * - packaging containing residues of hazardous substances
	The recommended method of disposal of the substance/preparation:	Spilled product let absorb in inert absorbent material and pass it on to a person who is in charge of its removal. The product cannot be removed together with local or other waste. Do not wash away into sewers.
	The recommended method of disposal of contaminated product packaging:	Emptied containers (after thorough flushing) can be reused, or put away into a container, designated for separate collection (plastics). Possible slight residuals of hydroquinone in the empty, rinsed container, transform into harmless chinone form. (oxidation process)
	Waste legislation	Directive No. 2008/98/ES

SECTION 14	Transport information
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Land transport (road / rail) ADR/RID , Maritime transport IMDG, Air transport ICAO-TI and IATA-DGR:

For the transport of the product **is not** classified as a dangerous thing (goods).

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard class(es)	Not applicable
14.4	Packing group	Not applicable
	Labels	
14.5	Environmental hazard	See to section 12
	Marine pollutant	Not
14.6	Special precautions for user	See to section 8
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable

SECTION 15	Regulatory information
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture
	Regulation (EC) No 1907/2006, registration, evaluation, authorisation, restriction chemicals (REACH) Regulation (EC) No 2015/830, Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification,

	labelling and packaging of substances and mixtures Decree No. 381/2001 Coll. Establishing the Waste Catalogue. Government Regulation No. 361/2007 Coll. On the health conditions of workers at work European Agreement concerning the international carriage of dangerous goods (ADR) International Maritime Dangerous Goods Code (IMDG Code) IATA Dangerous Goods Regulations (DGR)
15.2	Chemical safety assessment
	The chemical safety assessment for the product was not made.

SECTION 16	Other information
Abbreviations, symbols	
Eye Irrit.2	Serious eye irritation (Category 2)
Skin Irrit.2	Skin Irritation (Category 2)
Skin Corr. 1A	Skin caustic (burns) (Cat. 1A)
CLP : Regulation (EC) č.1272/2008 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals SVHC: Substance of very high concerns PBT: Persistent, bioaccumulative and toxic vPvB :(very) Persistent, (very) Bioaccumulative RID: Regulations Concerning the International Transport of Dangerous Goods by Rail ICAO: International Civil Aviation Organisation ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level PNEC: Predicted No-Effect Concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent EC50: Median Effective Concentration LOAEL: Lowest observed adverse effect level NOAEL: No Observed Adverse Effect Level NOEC: No Observed Effect Concentration NPK-P, PEL: Hygienic limits of chemical substances for working environment (the Czech Republic) N.a.: Not available	

Materials used for the processing of safety data sheet	
Information provided by the producer	
Material Safety Data Sheets (MSDS) for chemical substances	
Classification (according to Regulation No 1272/2008 – CLP): calculation method	
H-phrases :	
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation
Guidance regarding the training of workers:	

Workers coming into contact with hazardous chemicals or products must have access to data which are presented in this MSDS and be familiar with them clearly.
Person transporting hazardous chemicals and preparations must be familiar with guidelines for emergency response in accordance with regulations on hazardous goods within the meaning of ADR / RID.
The information contained in this MSDS are currently valid data and best practices for use and handling of this substance under normal conditions. Any other use or handling of this substance, which is not consistent with those of MSDS, excludes liability for defects, respectively damage, which would otherwise meet the producer, importer or retailer.

Revised safety data sheet:

Revision:

version 5.0 – new format MSDS (Regulation 2015/830)



Material Safety Data Sheet

According to Regulation No 1907/2006/EC – REACH, No. 2015/830 and No 1272/2008/EC - CLP

Date of revision : 02/16/2016

Version No: 5.0

Replaced version No: 4.1

SECTION 1	Identification of the substance/mixture and of the company/undertaking	
1.1	Product identifier	Black and white reversal film set, part B₂
	Other name or labelling of product:	
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Concentrate of bleaching bath for processing of black and white reversal film Fomapan R100	
1.3	Details of the supplier of the safety data sheet	
	Supplier : Downstream User (Producer Mixture)	FOMA BOHEMIA spol. s r.o.(Ltd.) J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111
	E-mail address and phone number	ilona.spackova@foma.cz +420495733368
1.4	Emergency telephone number (Czech)	Toxicologic institute (TIS) Na Bojišti 1, 128 21 Praha 2 Tel. 224919293, 224915402 (continuous telephone information service)

SECTION 2	Hazards identification	
2.1	Classification (according to Regulation No 1272/2008 – CLP)	
	Skin Irrit.2;H315 Eye Irrit.2;H319 Aquatic Chronic 3: H412	
	<u>The most important adverse physicochemical, human health and environmental effects:</u> May cause irritation skin and eye. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment	

2.2	Label elements (according to Regulation No 1272/2008/EC– CLP)	
Identification of product		Black and white reversal film set, part B ₂
hazard pictogram		 
signal word		Warning
hazard statement(s) (H-, phrases)	H315 H319 H412	Causes skin irritation Causes serious eye irritation Harmful to aquatic life with long lasting effects.
precautionary statement (P- phrases)	P102 P280 P305+P351+P338 P302+P352 P273 P501	Keep out of reach of children Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing IF ON SKIN: Wash with plenty of water/soap Avoid release to the environment Dispose of contents/container to collecting place for dangerous waste in accordance with national regulations.
		Contains: Potassium permanganate
		FOMA BOHEMIA spol. s r.o., J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111

2.3	Other hazards
	The substance does not belong to the category of PBT, vPvB, SVHC

SECTION 3		Composition/information on ingredients				
3.2		Mixtures				
Folder name	Registration number	Index number	CAS number	ES number	Content % in the solution	Classification
Potassium permanganate	Not available	025-002-00-9	7722-64-7	231-760-3	< 2	Ox.Sol.2;H272 Acute Tox.4;H302 Skin Corr1B;H314 Aquatic Acute1;H400 (*M acute=10) Aquatic Chronic1; H410

Solution

(Full text H-phrases... section 16)

SECTION 4	First aid measures
4.1	Description of first aid measures
	Lead the disabled person from the contaminated area, bring him/her into a state of peace and facilitate breathing by loosening clothing, watch, and if necessary maintain its vital functions. If you are experiencing symptoms of acute injury (shortness of breath, persistent cough, chest pain, nausea, impaired sensory perception, fainting, etc.), call a physician or transport the injured person to a doctor.

	After contact with skin: Wash affected area thoroughly with water.
	Eye Contact: Remove any contact lenses and wash eyes with plenty of water as soon as possible. If necessary, use force to open tightly closed eyelids. Take care not to rinse contaminated water into the non-affected eye. Do not neutralize. Seek medical help.
	Exposure by inhalation: Remove patient to fresh air, rinse eyes, mouth and nasal cavity with lukewarm water.
	Ingestion: Calm affected person, rinse his mouth with clean water. Force the affected person to drink a glass of cold water (about 0,4 dl). Do not induce vomiting. If affected person vomit spontaneously, control to prevent inhalation of vomit. Do not administer either activated charcoal or neutralizing agent. Call a physician or transport the affected person to a doctor.
4.2	Most important symptoms and effects, both acute and delayed
	Not known
4.3	Indication of any immediate medical attention and special treatment needed
	In the workplace, running water and soap.

SECTION 5	Firefighting measures
5.1	Extinguishing media
	The product (liquid) is not flammable. Extinguishing agents must be adapted to burning substances in surrounding.
	Inappropriate extinguishing media: N.a.
5.2	Special hazards arising from the substance or mixture
	Potassium permanganate is substance supporting burning. The product- solution is incombustible.
5.3	Advice for firefighters: Breathing apparatus, workwear

SECTION 6	Accidental release measures
6.1	Personal precautions, protective equipment and emergency procedures
	Take persons not participating in removing the consequences of the accident out of reach. Ventilate enclosed spaces. Use the prescribed personal protective equipment when removing the consequences of the accident. Use breathing apparatus and complete protective suit when working on the disposal of the accident. Smoking and manipulation with open fire is prohibited.
6.2	Environmental precautions
	Do not allow substance to enter soil, sewage system, surface and groundwater.
6.3	Methods and material for containment and cleaning up
	Let soak it to inert absorption products. Rinse the affected area thoroughly with water. Small leak strongly dilute with water.
6.4	Reference to other sections
	See section 13

SECTION 7	Handling and storage
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7.1	Precautions for safe handling
	Follow the safety rules while working. Wear recommended personal protective equipment. Avoid contact with eyes. Eating, drinking, smoking, working with burning materials and open fire is prohibited while working. Equipment must contain fire extinguishers in enclosed areas, ventilation must be ensured naturally or mechanically in enclosed spaces. Workplaces must be kept clean and escape routes must remain free.
7.2	Conditions for safe storage, including any incompatibilities
	Store in original containers in a cool, dry and well ventilated place. Containers should be stored separately from food. The working solution must be prepared according to the instructions.
7.3	Specific end use(s)
	See in 1.2. , Other uses – not available

SECTION 8	Exposure controls/personal protection
8.1	Control parameters
	Government Regulation No 361/2007 Coll. - Conditions for health workers at work and occupational exposure limits in the air of workplaces and ways of measuring and evaluating. (Czech) <i>Mangan- its compounds as Mn</i> PEL 1 mg/m ³ NPK-P 2 mg/m ³ Substance is not listed in Notice. No.432/2003 Coll., Laying down limit values of biological exposure tests: not available
8.2	Exposure controls
	Individual protection measures, incl. protective equipment
	Technical measures: Working place must be equipped with a local suction and a source of running water if the eyes irrigation and washing of hands or affected parts of skin is needed. Tightly closed containers and equipment, natural and mechanical ventilation. Avoid contact with eyes and mouth, avoid inhalation and skin staining. Eating, drinking and smoking is prohibited while working. Avoid contact with food substances and drinks. After work wash hands with soap and water. Take off polluted clothes if needed.
	Respiratory protection: During normal handling is not required.
	Hand protection: During normal handling is not required.
	Eye protection: Safety glasses
	Skin protection: Workwear
	Environmental exposure: Secure the spaces against the leakage into watercourses, soil and sewage system.

SECTION 9	Physical and chemical properties	
9.1	Information on basic physical and chemical properties	
	Appearance	Light- violet liquid
	Odour	no
	pH	7-9
	Melting point/freezing point	about 0 ° C
	Initial boiling point and boiling range	About 100 ° C

	Flash point	Fireproof
	Evaporation rate	N.a.
	Flammability	Incombustible
	Upper/lower flammability or explosive limits	Irrelevant
	Vapour pressure	N.a
	Vapour density	N.a
	Oxidising properties	N.a
	Relative density	1.24-1.25 g/cm ³
	Solubility – water	Solution
	Partition coefficient: n-octanol/water	Unknown
	Auto-ignition temperature	Irrelevant
	Decomposition temperature	N.a.
	Viscosity;	N.a.
	Explosive properties	No
9.2	Other information	
	Fat solubility	No
	Conductivity	N.a.

SECTION 10	Stability and reactivity
10.1	Reactivity
	Under normal conditions the product is stable
10.2	Chemical stability
	Under normal conditions the product is stable
10.3	Possibility of hazardous reactions
	N.a.
10.4	Conditions to avoid
	Light, intensive heating.
10.5	Incompatible materials
	Inorganic acids, peroxides, strong oxidation agents, alkali metals, flammable organic substances
10.6	Hazardous Decomposition Products
	Not available

SECTION 11	Toxicological information
11.1	Information on toxicological effects

Acute toxicity	<i>Potassium permanganate</i> : LD ₅₀ , oral, rat (mg.kg ⁻¹). 1090
Skin corrosion/irritation	Causes skin irritation
Serious eye damage/eye irritation	Causes serious eye irritation
Respiratory or skin sensitisation	Based on available data, the criteria for this classification are not match up
Germ cell mutagenicity	Based on available data, the criteria for this classification are not match up
Carcinogenicity	Based on available data, the criteria for this classification are not match up
Reproductive toxicity	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — single exposure	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — repeated exposure	Based on available data, the criteria for this classification are not match up
Aspiration hazard	Based on available data, the criteria for this classification are not match up
<u>Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:</u>	
Toxicity oral. (ingestion / swallowing): The product (solution) is not dangerous.	
Toxicity inhal. (inhalation): The product (solution) is not dangerous.	
Toxicity dermal. Causes skin irritation	
Eye Contact: Causes serious eye irritation	
Immediate, delayed and chronic effects of short and long term exposure: N.a.	

SECTION	Ecological information
12	
12.1	Toxicity
	<i>Potassium permanganate</i> : EC ₅₀ (fish)/96hour: 0.1 mg/l EC ₅₀ (daphnia)/48hour: 0.056 mg/l
12.2	Persistence and degradability
	Inorganic substances , irrelevant.
12.3	Bioaccumulative potential
	N.a.
12.4	Mobility in soil
	N.a., the product is soluble in water

12.5	Results of PBT and vPvB assessment
	Not available. Substance is not identified as a PBT or vPvB
12.6	Other adverse effects
	Toxic to aquatic life with long lasting effects.

SECTION 13	Disposal considerations	
13.1	Waste treatment methods	
	Code and type of waste	09 01 05* – bleaching solutions and solutions of bleaching fixers 20 01 17* - Photochemicals 15 01 10 * - packaging containing residues of hazardous substances
	The recommended method of disposal of the substance/ preparation:	Spilled product let absorb in inert absorbent material and pass it on to a person who is in charge of its removal. The product cannot be removed together with local or other waste. Do not wash away into sewers.
	The recommended method of disposal of contaminated product packaging:	Emptied containers (after thorough flushing) can be reused, or put away into a container, designated for separate collection (plastics). Possible slight residuals of hydroquinone in the empty, rinsed container, transform into harmless quinone form. (oxidation process)
	Waste legislation	Directive No. 2008/98/ES

SECTION 14	Transport information	
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Land transport ADR/RID (cross- border), Maritime transport IMDG, Air transport ICAO-TI and IATA-DGR:
For the transport of the product **is not** classified as a dangerous thing (goods).

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard class(es)	Not applicable
14.4	Packing group	Not applicable
	Labels	
14.5	Environmental hazard	See to section 12
	Marine pollutant	Not
14.6	Special precautions for user	See to section 8
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable

SECTION 15	Regulatory information
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture
	Regulation (EC) No 1907/2006, registration, evaluation, authorisation, restriction chemicals (REACH) Regulation (EC) No 2015/830, Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures Decree No. 381/2001 Coll. Establishing the Waste Catalogue. Government Regulation No. 361/2007 Coll. On the health conditions of workers at work European Agreement concerning the international carriage of dangerous goods (ADR) International Maritime Dangerous Goods Code (IMDG Code) IATA Dangerous Goods Regulations (DGR)
15.2	Chemical safety assessment
	The chemical safety assessment for the product was not made.

SECTION 16	
Abbreviations, symbols	
Ox.Sol.2	Oxidising Solid, ,Category 2
Acute Tox.4	Acute toxicity (oral), Category 4
SkinCorr1B	Skin caustic (burns) (Cat. 1B)
Aquatic Acute1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard, Category 3
Eye Irrit.2	Eye irritation (Category 2)
Skin Irrit.2	Skin irritation (Category 2)
CLP : Regulation (EC) č.1272/2008 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals SVHC: Substance of very high concerns PBT: Persistent, bioaccumulative and toxic vPvB :(very) Persistent, (very) Bioaccumulative RID: Regulations Concerning the International Transport of Dangerous Goods by Rail ICAO: International Civil Aviation Organisation ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level PNEC: Predicted No-Effect Concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent EC50: Median Effective Concentration	

LOAEL: Lowest observed adverse effect level
 NOAEL: No Observed Adverse Effect Level
 NOEC: No Observed Effect Concentration
 NPK-P, PEL: Hygienic limits of chemical substances for working environment (the Czech Republic)
 M: multiplier factor
 N.a: not available

Materials used for the processing of safety data sheet

Information provided by the producer

Material Safety Data Sheets (MSDS) for chemical substances; List K&O;* M acute- see to section 12.1 (EC₅₀)

Classification (according to Regulation No 1272/2008 – CLP): calculation method

H-phrases :

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects

Guidance regarding the training of workers:

Workers coming into contact with hazardous chemicals or products must have access to data which are presented in this MSDS and be familiar with them clearly.

Person transporting hazardous chemicals and preparations must be familiar with guidelines for emergency response in accordance with regulations on hazardous goods within the meaning of ADR / RID.

The information contained in this MSDS are currently valid data and best practices for use and handling of this substance under normal conditions. Any other use or handling of this mixture, which is not consistent with those of MSDS, excludes the responsibility for defects, more precisely for damage for which the producer, importer or retailer would be otherwise responsible.

Revised safety data sheet

Version 5.0 – Edit new format MSDS (Regulation 2015/830), section 3.2 – changed classification substance, section 2 -change of classification and labelling , section 14 – changed information for transport



Material Safety Data Sheet

According to Regulation No 1907/2006/EC – REACH, No. 2015/830 and No 1272/2008/EC - CLP

Date of revision : 02/17/2016

Version No: 5.0
Replaced version No: 4.1

SECTION 1	Identification of the substance/mixture and of the company/undertaking	
1.1	Product identifier	Black and white reversal film set, part C
	Other name or labelling of product:	
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Concentrate of cleaning bath for processing of black and white reversal film Fomapan R100	
1.3	Details of the supplier of the safety data sheet	
	Supplier : Downstream User (Producer Mixture)	FOMA BOHEMIA spol. s r.o.(Ltd.) J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111
	E-mail address and phone number	ilona.spackova@foma.cz +420495733368
1.4	Emergency telephone number (Czech)	Toxicologic institute (TIS) Na Bojišti 1, 128 21 Praha 2 Tel. 224919293, 224915402 (continuous telephone information service)

SECTION 2	Hazards identification	
2.1	Classification (according to Regulation No 1272/2008, 790/2009 – CLP)	
	AcuteTox.4;H302 Eye Dam.1;H318	
	<u>The most important adverse physicochemical, human health and environmental effects:</u> Harmful if swallowed. Causes serious eye damage	

2.2	Label elements (according to Regulation No 1272/2008/EC, 790/2009/EC – CLP)	
Identification of product		Black and white reversal film set, part C
hazard pictogram		
signal word		Danger
hazard statement(s) (H-, phrases)	H302 H318 EUH031	Harmful if swallowed Causes serious eye damage Contact with acids liberates toxic gas.
precautionary statement (P- phrases)	P102 P301+P310 P305+P351+P338 P280 P501	Keep out of reach of children. IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing Wear eye protection/face protection. Dispose of contents/container to collecting place for dangerous waste in accordance with national regulations.
		Contain: sodium pyrosulfite
		FOMA BOHEMIA spol. s r.o., J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111

2.3	Other hazards
	The substance does not belong to the category of PBT, vPvB, SVHC

SECTION 3	Composition/information on ingredients					
3.2	Mixtures					
Folder name	Registration number	Index number	CAS number	ES number	Content % in the solution	Classification
sodium pyrosulfite	01-2119531326-45-0000	016-063-00-2	7681-57-4	231-673-0	< 40	Acute Tox.4;H302 Eye Dam.1;H318

(Full text H-phrases... section 16)

SECTION 4	First aid measures
4.1	Description of first aid measures
	Lead the disabled person from the contaminated area, bring him/her into a state of peace and facilitate breathing by loosening clothing, watch, and if necessary maintain its vital functions. If you are experiencing symptoms of acute injury (shortness of breath, persistent cough, chest pain, nausea, impaired sensory perception, fainting, etc.), call a physician or transport the injured person to a doctor.
	After contact with skin: Wash affected area thoroughly with water.
	Eye Contact: Remove any contact lenses and wash eyes with plenty of water as soon as possible. If necessary, use force to open tightly closed eyelids. Take care not to rinse contaminated water into the non-affected eye. Do not neutralize. Seek medical help.
	Exposure by inhalation: Remove patient to fresh air, rinse eyes, mouth and nasal cavity with lukewarm water.

	Ingestion: Calm affected person, rinse his mouth with clean water. Force the affected person to drink a glass of cold water (about 0,4 dl). Do not induce vomiting. If affected person vomit spontaneously, control to prevent inhalation of vomit. Do not administer either activated charcoal or neutralizing agent. Call a physician or transport the affected person to a doctor.
4.2	Most important symptoms and effects, both acute and delayed
	Exposure by inhalation: cough, breathlessness, sore throat Eye Contact: ache in eye Ingestion: nausea, vomiting
4.3	Indication of any immediate medical attention and special treatment needed
	In the workplace running water and soap.

SECTION 5	Firefighting measures
5.1	Extinguishing media
	The product is not flammable. Extinguishing agents adapt burning nearby.
	Inappropriate extinguishing media: N.a.
5.2	Special hazards arising from the substance or mixture
	Maybe it emits toxic gases – oxides of sulphur
5.3	Advice for firefighters: Breathing apparatus, workwear

SECTION 6	Accidental release measures
6.1	Personal precautions, protective equipment and emergency procedures
	Take persons not participating in removing the consequences of the accident out of reach. Ventilate enclosed spaces. Use the prescribed personal protective equipment when removing the consequences of the accident. Use breathing apparatus and complete protective suit when working on the disposal of the accident. Smoking and manipulation with open fire is prohibited.
6.2	Environmental precautions
	Do not allow substance to enter soil, sewage system, surface and groundwater.
6.3	Methods and material for containment and cleaning up
	Let soak it to inert absorption products. Rinse the affected area thoroughly with water. Small leak strongly dilute with water.
6.4	Reference to other sections
	See section 13

SECTION 7	Handling and storage
7.1	Precautions for safe handling
	Follow the safety rules while working. Wear recommended personal protective equipment. Avoid contact with eyes. Eating, drinking, smoking, working with burning materials and open fire is prohibited while working. Equipment must contain fire extinguishers in enclosed areas, ventilation must be ensured

	naturally or mechanically in enclosed spaces. Apparatus, which works with the substance must be tight, equipped with emergency escape in case of space (emergency baths, catch pits) and to prevent leakage into the environment. Electrical equipments must be installed in non explosion proof (including lighting). Workplaces must be kept clean and escape routes must remain free.
7.2	Conditions for safe storage, including any incompatibilities
	Store in original container in a cool, dry and well ventilated place. Containers should be stored separately from food. The working solution must be prepared according to the instructions.
7.3	Specific end use(s)
	See in 1.2. , Other uses – not available

SECTION 8	Exposure controls/personal protection
8.1	Control parameters
	Government Regulation No 361/2007 Coll. - Conditions for health workers at work and occupational exposure limits in the air of workplaces and ways of measuring and evaluating. (Czech) Sulphur dioxide: PEL 1,5 mg/m ³ NPK-P 5 mg/m ³
	Substance is not listed in Notice. No.432/2003 Coll., Laying down limit values of biological exposure tests: not available <i>Sodium pyrosulfite</i>
	DNEL :
	Workers General
	Long-Term – inhal 225 mg/m ³ 66 mg/m ³
	Long-Term – oral 8.6 mg/kg bw/day
	PNEC :
	Freshwater 1 mg/l
	Marine water 0.1 mg/l
	Microorganisms in Sewage Treatment Plant (STP) 75.4 mg/l
8.2	Exposure controls
	Individual protection measures, incl. protective equipment
	Technical measures: Working place must be equipped with a local suction and a source of running water if the eyes irrigation and washing of hands or affected parts of skin is needed. Tightly closed containers and equipment, natural and mechanical ventilation. Avoid contact with eyes and mouth, avoid inhalation and skin staining. Eating, drinking and smoking is prohibited while working. Avoid contact with food substances and drinks. After work wash hands with soap and water. Take off polluted clothes if needed.
	Respiratory protection: During normal handling is not required. In sensitive people (due to possible respiratory irritation) is recommended when mixing solution respirator use
	Hand protection: Use rubber (PE, nitril) gloves
	Eye protection: Safety glasses or face protection
	Skin protection: Workwear
	Environmental exposure: Secure the spaces against the leakage into watercourses, soil and sewage system.

SECTION 9	Physical and chemical properties
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9.1	Information on basic physical and chemical properties	
	Appearance	yellowish liquide
	Odour	nonspecific
	pH	3 - 4
	Melting point/freezing point	about 0 ° C
	Initial boiling point and boiling range	about 100 ° C
	Flash point	Fireproof
	Evaporation rate	N.a.
	Flammability	Incombustible
	Upper/lower flammability or explosive limits	Irrelevant
	Vapour pressure	<20 mbar
	Vapour density	Unknown
	Oxidising properties	No
	Relative density	1.29.-1,31 g/cm ³
	Solubility – water	Solution
	Partition coefficient: n-octanol/water	Unknown
	Auto-ignition temperature	Irrelevant
	Decomposition temperature	N.a.
	Viscosity;	N.a.
	Explosive properties	No
9.2	Other information	
	Fat solubility	N.a.
	Conductivity	N.a.

SECTION 10	Stability and reactivity	
10.1	Reactivity	
	Under normal conditions the product is stable	
10.2	Chemical stability	
	Under normal conditions the product is stable	
10.3	Possibility of hazardous reactions	
	Strong minerale acids	
10.4	Conditions to avoid	
	High temperature	
10.5	Incompatible materials	
	Not available	

10.6	Hazardous Decomposition Products
	Possible development of sulphur dioxide at elevated temperatures and reaction with acids

SECTION 11		Toxicological information	
11.1		Information on toxicological effects	
Acute toxicity		Harmful if swallowed	
Skin corrosion/irritation		Based on available data, the criteria for this classification are not match up	
Serious eye damage/eye irritation		Causes serious eye damage	
Respiratory or skin sensitisation		Based on available data, the criteria for this classification are not match up	
Germ cell mutagenicity		Based on available data, the criteria for this classification are not match up	
Carcinogenicity		Based on available data, the criteria for this classification are not match up	
Reproductive toxicity		Based on available data, the criteria for this classification are not match up	
Specific target organ toxicity — single exposure		Based on available data, the criteria for this classification are not match up	
Specific target organ toxicity — repeated exposure		Based on available data, the criteria for this classification are not match up	
Aspiration hazard		Based on available data, the criteria for this classification are not match up	
Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:			
Toxicity oral. (ingestion / swallowing): If swallowed: strong acid burning of esofagus <i>sodium pyrosulfite</i> LD ₅₀ , oral, rat: 1540 mg/kg (OECD 401 - Acute Oral Toxicity) LD ₅₀ , dermal, rat: >2000 mg/kg (OECD 402 - Acute Dermal Toxicity) LC ₅₀ , inhal, rat/4 h > 5,5 mg/l (OECD 403 - Acute Ihalation Toxicity)			
Toxicity inhal. (inhalation): The product is not dangerous			
Toxicity dermal. The product is not dangerous			
Eye Contact: Causes serious eye damage			
Immediate, delayed and chronic effects of short and long term exposure: N.a.			

SECTION 12	Ecological information	
12.1	Toxicity	
	<i>Sodium pyrosulfite</i> EC ₅₀ /17 h 56 mg/l (germs) <i>Pseudomonas putida</i> EC ₅₀ /48 h 89 mg/l (dafnie) <i>Daphnia magna</i> EC ₅₀ /72 h 43.8 mg/l (algae) (OECD 201 - Alga, Growth Inhibition Test) <i>Scenedesmus subspicatus</i>	

	LC ₅₀ /96 h 177.,8 mg/l (fish) (DIN 38412)Onchorhynchus mykiss NOEC/21 d > 10 mg/l (dafnie) (OECD 211 - Daphnia magna Reproduction Test)Daphnia magna
12.2	Persistence and degradability
	Inorganic substances- Irrelevant
12.3	Bioaccumulative potential
	It is not expected
12.4	Mobility in soil
	N.a., the product is soluble in water,
12.5	Results of PBT and vPvB assessment
	Not available. Substances are not identified as a PBT or vPvB
12.6	Other adverse effects
	No

SECTION 13	Disposal considerations	
13.1	Waste treatment methods	
	Code and type of waste	09 01 05* – bleaching solutions and solutions of bleaching fixers 15 01 10 * - packaging containing residues of hazardous substances
	The recommended method of disposal of the substance/ preparation:	Spilled product let soak up with inert absorbent material and pass the person authorized to remove. Must not be disposed of with household or other waste. Do not wash into sewers.
	The recommended method of disposal of contaminated product packaging:	Emptied containers pass to the authorized person
	Waste legislation	Directive No. 2008/98/ES

SECTION 14	Transport information	
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Land transport (road / rail) ADR/RID , Maritime transport IMDG, Air transport ICAO-TI and IATA-DGR:

For the transport of the product **is not** classified as a dangerous thing (goods).

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard class(es)	Not applicable
14.4	Packing group	Not applicable
	Labels	
14.5	Environmental hazard	See to section 12
	Marine pollutant	Not

14.6	Special precautions for user	See to section 8
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable

SECTION 15	Regulatory information
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture
	Regulation (EC) No 1907/2006, registration, evaluation, authorisation, restriction chemicals (REACH) Regulation (EC) No 2015/830, Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures Decree No. 381/2001 Coll. Establishing the Waste Catalogue. Government Regulation No. 361/2007 Coll. On the health conditions of workers at work European Agreement concerning the international carriage of dangerous goods (ADR) International Maritime Dangerous Goods Code (IMDG Code) IATA Dangerous Goods Regulations (DGR)
15.2	Chemical safety assessment
	The chemical safety assessment for the product was not made.

SECTION 16	Other information
Abbreviations, symbols	
Eye Dam.1	Serious eye damage (Category 1)
Acute Tox.4	Acute toxicity (oral), Hazard (Category 4)
CLP : Regulation (EC) č.1272/2008 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals SVHC: Substance of very high concerns PBT: Persistent, bioaccumulative and toxic vPvB :(very) Persistent, (very) Bioaccumulative RID: Regulations Concerning the International Transport of Dangerous Goods by Rail ICAO: International Civil Aviation Organisation ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level PNEC: Predicted No-Effect Concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent EC50: Median Effective Concentration LOAEL: Lowest observed adverse effect level NOAEL: No Observed Adverse Effect Level NOEC: No Observed Effect Concentration NPK-P, PEL: Hygienic limits of chemical substances for working environment (the Czech Republic) N.a.: not available	

Materials used for the processing of safety data sheet	
Information provided by the producer Material Safety Data Sheets (MSDS) for chemical substances	
Classification (according to Regulation No 1272/2008 – CLP): calculation method	
H-phrases :	
H302	Harmful if swallowed
H318	Causes serious eye damage
EUH 031	Contact with acids liberates toxic gas.
Guidance regarding the training of workers:	
Workers coming into contact with hazardous chemicals or products must have access to data which are presented in this MSDS and be familiar with them clearly. Person transporting hazardous chemicals and preparations must be familiar with guidelines for emergency response in accordance with regulations on hazardous goods within the meaning of ADR / RID. The information contained in this MSDS are currently valid data and best practices for use and handling of this substance under normal conditions. Any other use or handling of this mixture which is not consistent with those of MSDS excludes the responsibility for defects, more precisely for damage for which the producer, importer or retailer would be otherwise responsible.	
Revised safety data sheet:	
Version 5.0 – new format MSDS (Regulation 2015/830)	



Material Safety Data Sheet

According to Regulation No 1907/2006/EC – REACH, No. 2015/830 and No 1272/2008/EC - CLP

Date of revision : 10/04/2018

Version No: 7.0

Replaced version No: 6.0

SECTION 1	Identification of the substance/mixture and of the company/undertaking	
1.1	Product identifier	Black and white reversal film set, part D
	Other name or labelling of product:	
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Concentrate of acid fixer for processing of black and white reversal films.	
1.3	Details of the supplier of the safety data sheet	
	Supplier : Downstream User (Producer Mixture)	FOMA BOHEMIA spol. s r.o.(Ltd.) J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111
	E-mail address and phone number	ilona.spackova@foma.cz +420495733368
1.4	Emergency telephone number (Czech)	Toxicologic institute (TIS) Na Bojišti 1, 128 21 Praha 2 Tel. 224919293, 224915402 (continuous telephone information service)

SECTION 2	Hazards identification
2.1	Classification (according to Regulation No 1272/2008 – CLP)
	The mixture is not classified - shows no hazardous properties
	<u>The most important adverse physicochemical, human health and environmental effects:</u> Upon contact with the eyes can cause moderate irritation.

2.2	Label elements (according to Regulation No 1272/2008/EC– CLP)	
Identification of product		Black and white reversal film set, part D
hazard pictogram		
signal word		
hazard statement(s) (H- , EUH- phrases)		
precautionary statement (P- phrases)		

	FOMA BOHEMIA spol. s r.o., J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111

2.3	Other hazards
	Sodium tetraborate decahydrate belongs to the category SVHC

SECTION 3		Composition/information on ingredients				
3.2		Mixtures				
Folder name	Registration number	Index number	CAS number	ES number	Content % in the solution	Classification
Acetic acid	01-2119475328-30	607-002-00-6	64-19-7	200-580-7	< 5	Flam Liq.3;H226 SkinCorr.1A;H314
Sodium tetraborate decahydrate	01-2119490790-32-0000	005-011-01-1	1303-96-4	215-540-4	< 2	Repr.1B;H360FD EyeIrrit.2;H319
Citric acid	01-2119457026-42-xxxx	Not available	5949-29-1	201-069-1	< 1	Eye Irrit.2;H319

Solution

(Full text H-phrases... section 16)

SECTION 4		First aid measures
4.1	Description of first aid measures	
	Lead the disabled person from the contaminated area, bring him/her into a state of peace and facilitate breathing by loosening clothing, watch, and if necessary maintain its vital functions. If you are experiencing symptoms of acute injury (shortness of breath, persistent cough, chest pain, nausea, impaired sensory perception, fainting, etc.), call a physician or transport the injured person to a doctor.	
	After contact with skin: Wash affected area thoroughly with water.	
	Eye Contact: Remove any contact lenses and wash eyes with plenty of water as soon as possible. If necessary, use force to open tightly closed eyelids. Take care not to rinse contaminated water into the non-affected eye. Do not neutralize. Seek medical help.	
	Exposure by inhalation: Remove patient to fresh air, rinse eyes, mouth and nasal cavity with lukewarm water	
	Ingestion: Calm affected person, rinse his mouth with clean water. Force the affected person to drink a glass of cold water (about 0,4 dl). Do not induce vomiting. If affected person vomit spontaneously, control to prevent inhalation of vomit. Do not administer either activated charcoal or neutralizing agent. Call a physician or transport the affected person to a doctor.	
4.2	Most important symptoms and effects, both acute and delayed	
	Not known	
4.3	Indication of any immediate medical attention and special treatment needed	

	In the workplace, running water and soap.
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SECTION 5	Firefighting measures
5.1	Extinguishing media
	The product (liquid) is not flammable. Extinguishing agents must be adapted to burning substances in surrounding.
	Inappropriate extinguishing media: N.a.
5.2	Special hazards arising from the substance or mixture
	At elevated temperatures or by contact with acid can release sulfur dioxide
5.3	Advice for firefighters: Breathing apparatus

SECTION 6	Accidental release measures
6.1	Personal precautions, protective equipment and emergency procedures
	Take persons not participating in removing the consequences of the accident out of reach. Ventilate enclosed spaces. Use the prescribed personal protective equipment when removing the consequences of the accident. Use breathing apparatus and complete protective suit when working on the disposal of the accident. Smoking and manipulation with open fire is prohibited.
6.2	Environmental precautions
	Do not allow substance to enter soil, sewage system, surface and groundwater.
6.3	Methods and material for containment and cleaning up
	Let soak it to inert absorption products. Rinse the affected area thoroughly with water. Small leak strongly dilute with water.
6.4	Reference to other sections
	See section 13

SECTION 7	Handling and storage
7.1	Precautions for safe handling
	Follow the safety rules while working. Wear recommended personal protective equipment. Avoid contact with eyes. Eating, drinking, smoking, working with burning materials and open fire is prohibited while working. Equipment must contain fire extinguishers in enclosed areas, ventilation must be ensured naturally or mechanically in enclosed spaces. Workplaces must be kept clean and escape routes must remain free.
7.2	Conditions for safe storage, including any incompatibilities
	Store in original containers in a cool, dry and well ventilated place. Containers should be stored separately from food. The working solution must be prepared according to the instructions.
7.3	Specific end use(s)
	See in 1.2. , Other uses – not available

SECTION 8	Exposure controls/personal protection
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8.1	Control parameters
	Government Regulation No 361/2007 Coll. - Conditions for health workers at work and occupational exposure limits in the air of workplaces and ways of measuring and evaluating. (Czech) Acetic acid PEL 25 mg/m ³ NPK-P 35 mg/m ³ Substance is not listed in Notice. No.432/2003 Coll., Laying down limit values of biological exposure tests: not available
8.2	Exposure controls
	Individual protection measures, incl. protective equipment
	Technical measures: Working place must be equipped with a local suction and a source of running water if the eyes irrigation and washing of hands or affected parts of skin is needed. Tightly closed containers and equipment, natural and mechanical ventilation. Avoid contact with eyes and mouth, avoid inhalation and skin staining. Eating, drinking and smoking is prohibited while working. Avoid contact with food substances and drinks. After work wash hands with soap and water. Take off polluted clothes if needed.
	Respiratory protection: During normal handling is not required.
	Hand protection: Use rubber (PE, nitril) gloves
	Eye protection: Safety glasses- recommended
	Skin protection: Workwear
	Environmental exposure: Secure the spaces against the leakage into watercourses, soil and sewage system.

SECTION 9		Physical and chemical properties
9.1	Information on basic physical and chemical properties	
	Appearance	Colourless- Slightly yellow liquid
	Odour	Moderate, nonspecific
	pH (20 °C)	5,5-5,8
	Melting point/freezing point	< 0 °C
	Initial boiling point and boiling range	> 100 °C
	Flash point	Fireproof
	Evaporation rate	N.a.
	Flammability	Incombustible
	Upper/lower flammability or explosive limits	Irrelevant
	Vapour pressure	<20 mbar
	Vapour density	Unknown
	Oxidising properties	No
	Relative density	1,29-1,31 g/cm ³
	Solubility – watter	Solution
	Partition coefficient: n-octanol/water	Unknown
	Auto-ignition temperature	Irrelevant
	Decomposition temperature	N.a.

	Viscosity;	N.a.
	Explosive properties	No
9.2	Other information	
	Fat solubility	N.a.
	Conductivity	N.a.

SECTION 10	Stability and reactivity
10.1	Reactivity
	Under normal conditions the product is stable
10.2	Chemical stability
	Under normal conditions the product is stable
10.3	Possibility of hazardous reactions
	Strong minerale acids
10.4	Conditions to avoid
	High temperature
10.5	Incompatible materials
	Not available
10.6	Hazardous Decomposition Products
	Possible development of sulphur dioxide at elevated temperatures and reaction with acids

SECTION 11	Toxicological information
11.1	Information on toxicological effects
Acute toxicity	Based on available data, the criteria for this classification are not match up
Skin corrosion/irritation	Based on available data, the criteria for this classification are not match up
Serious eye damage/eye irritation	Based on available data, the criteria for this classification are not match up
Respiratory or skin sensitisation	Based on available data, the criteria for this classification are not match up
Germ cell mutagenicity	Based on available data, the criteria for this classification are not match up
Carcinogenicity	Based on available data, the criteria for this classification are not match up
Reproductive toxicity	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — single exposure	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — repeated exposure	Based on available data, the criteria for this classification are not match up
Aspiration hazard	Based on available data, the criteria for this classification are not match up
<i>Acetic acid</i>	
LD ₅₀ / oral/rat:	3310 mg/kg
LD ₅₀ / dermal/rabbit:	1060 mg/kg

LC ₅₀ inhal, rat, (4h): 11.4 mg/l		
<i>Sodium tetraborate</i>		
DNEL :	Workers	General
Long-term – inhal., systemic.effect	6.7 mg/m ³	3. 4 mg/m ³
Long-term – dermal., systemic.effect	316.4 mg/kg bw/d	159.5 mg/kg bw/d
Long-term – oral., systemic.effect		0.79 mg/kg bw/d
Acute – oral., systemic.effect		0.79 mg/kg bw/d
<i>PNEC:</i>		
Freshwater	2.9 mg/l	
Marine water	2.9 mg/l	
Soil	5.7 mg/kg sediment dw	
Sewage treatment plant (STP)	10 mg/l	
<u>Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:</u>		
Toxicity oral. (ingestion / swallowing):		
Ingestion may cause irritation or burns to the digestive tract. It causes nausea.		
Toxicity inhal. (inhalation):		
The product (solution) is not dangerous.		
Toxicity dermal.		
The product (solution) is not dangerous.		
Eye Contact:		
Upon contact with the eyes can cause moderate irritation.		
Immediate, delayed and chronic effects of short and long term exposure:		
N.a.		

SECTION	Ecological information
12	
12.1	Toxicity
	<i>Acetic acid:</i> LC₅₀ ,fish (96h)- <i>Lepomis macrochirus</i>: 75 mg/l EC₅₀-<i>Daphnia magna</i>, (24h): 47mg/l Algae- IC₅ , <i>scenedesmus quaudricauda</i>, (16h): 4000 mg/l <i>Sodium tetraborate:</i> LC₅₀ Rainbow trout, 24 days (mg B/l): 88 LC₅₀ Rainbow trout, 32 days (mg B/l): 54 LC₅₀ Goldfish, 7 days (mg B/l): 65 LC₅₀ Goldfish, 3 days (mg B/l): 71 LC₅₀ Dab, 96 h (mg B/l): 74 EC₅₀ Daphnie, 24 h (mg B/l): 242 LC₅₀ Midge larva, 28 days (mg B/kg): 27 LC₅₀ Earthworm, 14 days (mg B/kg): 175 EC₁₀ Green algae, 96 h (mg B/l): 24 Low toxicity to the environment
12.2	Persistence and degradability

	<i>Acetic acid</i> : well biodegradation. Well biodegradation is supposed at other substances.
12.3	Bioaccumulative potential
	It is not expected
12.4	Mobility in soil
	N.a., the product is soluble in water
12.5	Results of PBT and vPvB assessment
	Not available. Substances are not identified as a PBT or vPvB
12.6	Other adverse effects
	Not available

SECTION 13	Disposal considerations	
13.1	Waste treatment methods	
	Code and type of waste	09 01 04* – fixer solutions 15 01 10 * - packaging containing residues of hazardous substances
	The recommended method of disposal of the substance/ preparation:	Spilled product let absorb in inert absorbent material and pass it on to a person who is in charge of its removal. The product cannot be removed together with local or other waste. Do not wash away into sewers.
	The recommended method of disposal of contaminated product packaging:	Emptied containers (after thorough flushing) can be reused, or put away into a container, designated for separate collection (plastics).
	Waste legislation	Directive No. 2008/98/ES

SECTION 14	Transport information	
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Land transport (road / rail) ADR/RID , Maritime transport IMDG, Air transport ICAO-TI and IATA-DGR:

For the transport of the product **is not** classified as a dangerous thing (goods).

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard class(es)	Not applicable
14.4	Packing group	Not applicable
	Labels	
14.5	Environmental hazard	See to section 12
	Marine pollutant	Not
14.6	Special precautions for user	See to section 8

14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable
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SECTION 15	Regulatory information	
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
	Regulation (EC) No 1907/2006, registration, evaluation, authorisation, restriction chemicals (REACH) Regulation (EC) No 2015/830, Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures Decree No. 381/2001 Coll. Establishing the Waste Catalogue. Government Regulation No. 361/2007 Coll. On the health conditions of workers at work European Agreement concerning the international carriage of dangerous goods (ADR) International Maritime Dangerous Goods Code (IMDG Code) IATA Dangerous Goods Regulations (DGR)	
15.2	Chemical safety assessment	
	The chemical safety assessment for the product was'nt made.	

SECTION 16	Other information	
Abbreviations, symbols		
Carc.2	Carcinogenicity (Category 2)	
Flam Liq.3	Flammable liquid (Category 3)	
Repr.1B	Reproductive toxicity (Category 1B)	
Acute Tox.4	Acute toxicity (Category 4)	
Skin Corr. 1A	Skin corrosion (Cat. 1A)	
Eye Irrit.2	Serious eye irritation (Cat. 2)	
CLP : Regulation (EC) č.1272/2008 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals SVHC: Substance of very high concerns PBT: Persistent, bioaccumulative and toxic vPvB :(very) Persistent, (very) Bioaccumulative RID: Regulations Concerning the International Transport of Dangerous Goods by Rail ICAO: International Civil Aviation Organisation ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level PNEC: Predicted No-Effect Concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent		

EC50: Median Effective Concentration
 LOAEL: Lowest observed adverse effect level
 NOAEL: No Observed Adverse Effect Level
 NOEC: No Observed Effect Concentration
 NPK-P, PEL: Hygienic limits of chemical substances for working environment (the Czech Republic)

Materials used for the processing of safety data sheet

Information provided by the producer
 Material Safety Data Sheets (MSDS) for chemical substances

Classification (according to Regulation No 1272/2008 – CLP): calculation method

H-phrases :

H351	Suspected of causing cancer
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H319	Causes serious eye irritation
H314	Causes severe skin burns and eye damage
H360FD	May damage fertility or the unborn child

Guidance regarding the training of workers:

Workers coming into contact with hazardous chemicals or products must have access to data which are presented in this MSDS and be familiar with them clearly. Person transporting hazardous chemicals and preparations must be familiar with guidelines for emergency response in accordance with regulations on hazardous goods within the meaning of ADR / RID.

The information contained in this MSDS are currently valid data and best practices for use and handling of this substance under normal conditions. Any other use or handling of this mixture which is not consistent with those of MSDS excludes the responsibility for defects, more precisely for damage for which the producer, importer or retailer would be otherwise responsible.

Revised safety data sheet:

Version 7.0 -change of mixture composition- changed sections 3,8,11,12