

SICHERHEITSDATENBLATT

ABSCHNITT 1: BEZEICHNUNG DES STOFFS BZW. DES GEMISCHS UND DES UNTERNEHMENS

1.1. Produktidentifikator:

Absortech Absorpole, Absortop, Absorflex, Absorbag

Chemische Bezeichnung: Calciumchlorid

CAS Nummer: 10043-52-4

EG-Nummer: 233-140-8

Indexnummer: 017-013-00-2

Registernummer: 01-2119494219-28

1.2. Relevante identifizierte Verwendungen des Stoffs und Verwendungen, von denen abgeraten wird:

Trocknungsmittel, Absorptionsmittel für den industriellen, privaten und professionellen Einsatz.

1.3. Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt:

Informationen zum Vertreiber/Hersteller:

Absortech Group

Tryckerivägen 4, 311 44 Falkenberg

Schweden

Tel: 034-64 20 70

1.3.1. Verantwortliche Person:

-

E-Mail:

info@absortech.com

1.4. Notrufnummer:

Bitte ausfüllen!

ABSCHNITT 2: MÖGLICHE GEFAHREN

2.1. Einstufung des Stoffs:

Einstufung gemäß Verordnung (EG) Nr. 1272/2008 (CLP):

Schwere Augenschädigung/-reizung, Gefahrenkategorie 2 – H319

Gefahrenhinweise:

H319 – Verursacht schwere Augenreizung.

2.2. Kennzeichnungselemente:

Chemische Bezeichnung: Calciumchlorid

CAS Nummer: 10043-52-4

EG-Nummer: 233-140-8

GHS07



ACHTUNG

Gefahrenhinweise:

H319 – Verursacht schwere Augenreizung.

Sicherheitshinweise:

P102 – Darf nicht in die Hände von Kindern gelangen.

P280 – Schutzhandschuhe/Schutzkleidung/Augenschutz tragen.

P305 + P351 + P338 – BEI BERÜHRUNG MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser ausspülen. Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter ausspülen.

P337 + P313 – Bei anhaltender Augenreizung: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.

2.3. Sonstige Gefahren:

Keine weiteren spezifischen Gefahren für den Menschen oder die Umwelt bekannt.

Ergebnisse der PBT- und vPvB-Beurteilung: Die Kriterien für PBT und vPvB gelten nicht für anorganische Substanzen (Calciumchlorid).

ABSCHNITT 3: ZUSAMMENSETZUNG/ANGABEN ZU BESTANDTEILEN

3.1. Stoffe:

Chemische Bezeichnung: Calciumchlorid

CAS Nummer: 10043-52-4

EG-Nummer: 233-140-8

Molekularformel: CaCl₂

Reinheit: 100 %

ABSCHNITT 4: ERSTE-HILFE-MAßNAHMEN

4.1. Beschreibung der Erste-Hilfe-Maßnahmen:

VERSCHLUCKEN:

Maßnahmen:

- Den Mund ausspülen und Wasser trinken.
- Kein Erbrechen herbeiführen.
- Wenn die Symptome andauern, einen Arzt konsultieren.

EINATMEN:

Maßnahmen:

- Patient an die frische Luft bringen, ausruhen lassen.
- Wenn die Symptome andauern, einen Arzt konsultieren.

HAUTKONTAKT:

Maßnahmen:

- Beschmutzte Kleidung ausziehen.
- Haut sofort mit reichlich Wasser und Seife abwaschen.
- Wenn die Symptome andauern, einen Arzt konsultieren.

AUGENKONTAKT:

Maßnahmen:

- Bei Kontakt mit den Augen mit weichem Wasserstrahl oder Augenspüllösung bei geöffneten Augenlidern spülen, inzwischen Augäpfel bewegen (mindestens 15 Minuten lang).
- Kontaktlinsen entfernen.
- Wenn die Symptome andauern, einen Arzt konsultieren.

4.2. Wichtigste akute oder verzögert auftretende Symptome und Wirkungen:

Einatmen: Kann leichte / vorübergehende Reizungen verursachen.

Hautkontakt: Kann leichte / vorübergehende Reizungen verursachen.

Augenkontakt: Verursacht intensive brennendes Gefühl, Tränenfluss / erhöhtes Reißen.

Verschlucken: Kann zu Reizungen in Mund und Rachen führen.

4.3. Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung:

Keine besondere Behandlung erforderlich, symptomatisch behandeln.

ABSCHNITT 5: MAßNAHMEN ZUR BRANDBEKÄMPFUNG

- 5.1. **Löschmittel:**
- 5.1.1. **Geeignete Löschmittel:**
Feuerlöschmitteln auf die Umgebung abstimmen.
- 5.1.2. **Ungeeignete Löschmittel:**
Keine ungeeigneten Löschmittel bekannt.
- 5.2. **Besondere vom Stoff oder Gemisch ausgehende Gefahren:**
Nicht entzündlich.
Im Brandfall können sich giftige und ätzende Dämpfe wie Chlorwasserstoff und andere Verbrennungsprodukte entwickeln.
- 5.3. **Hinweise für die Brandbekämpfung:**
Vorsichtsmaßnahmen nach dem Standardverfahren für chemische Brände.
Atemschutzgeräte zum Schutz vor giftigen / ätzenden Gasen und geeignete feuerfeste Schutzkleidung tragen.

ABSCHNITT 6: MAßNAHMEN BEI UNBEABSICHTIGTER FREISETZUNG

- 6.1. **Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren:**
- 6.1.1. **Nicht für Notfälle geschultes Personal:**
An der Unfallstelle darf sich nur ausgebildetes, entsprechende Schutzausrüstung tragendes Personal aufhalten.
- 6.1.2. **Einsatzkräfte:**
Staubentwicklung vermeiden.
Haut- und Augenkontakt vermeiden.
Beim Reinigen Schutzhandschuhe, Augenschutz und Schutzkleidung tragen.
Ungeschützte Personen fernhalten.
- 6.2. **Umweltschutzmaßnahmen:**
Das verschüttete Produkt und die Abfälle müssen nach den geltenden Umweltschutzbestimmungen behandelt werden. Das Produkt und die entstehenden Abfälle nicht in die Abwasserkanäle/den Boden/das Oberflächen- oder Grundwasser gelangen lassen. Im Falle einer Umweltverschmutzung die zuständigen Behörden in Übereinstimmung mit den geltenden Rechtsvorschriften sofort benachrichtigen.
- 6.3. **Methoden und Material für Rückhaltung und Reinigung:**
Das Produkt aufkehren und bis zur ordnungsgemäßen Beseitigung/Entsorgung in einen geeigneten, gekennzeichneten, verschließbaren Behälter für gefährliche Abfälle aufbewahren.
Entsprechend den örtlichen Vorschriften handhaben.
- 6.4. **Verweis auf andere Abschnitte:**
Gegebenenfalls ist auf die Abschnitte 8 und 13 zu verweisen.

ABSCHNITT 7: HANDHABUNG UND LAGERUNG

- 7.1. **Schutzmaßnahmen zur sicheren Handhabung:**
Die üblichen Hygienevorschriften beachten.
Einatmen und direkten Kontakt mit dem Produkt vermeiden.
Bei Produktverwendung nicht essen, trinken oder rauchen.
Normale Händehygiene.
Technische Maßnahmen:
Keine besonderen Maßnahmen erforderlich.
Hinweise zum Brand- und Explosionsschutz:
Keine besonderen Maßnahmen erforderlich.
- 7.2. **Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten:**
Technische Maßnahmen und Lagerbedingungen:
An einem kühlen, trockenen und gut belüfteten Ort lagern.
Das Produkt ist hygroscopisch.
Im beschrifteten Originalbehälter aufbewahren.
Unverträgliche Materialien: Siehe Abschnitt 10.5.
Verpackungsmaterial: Polyethylen-, Polypropylen- und Kunststoffmaterialien wie PVDF, PTFE und PFA. Ungeeignete Verpackungsmaterial: Aluminium.
- 7.3. **Spezifische Endanwendungen:**

Siehe Abschnitt 1.

ABSCHNITT 8: BEGRENZUNG UND ÜBERWACHUNG DER EXPOSITION/PERSÖNLICHE SCHUTZAUSRÜSTUNGEN

8.1. Zu überwachende Parameter:

Arbeitsplatzgrenzwerte (gemäß TRGS 900):

Der Stoff ist mit Expositionsgrenzwerten nicht geregelt.

Calciumchlorid (CAS: 10043-52-4):

DNEL Werte		Orale Aufnahme		Hautexposition		Inhalationsexposition	
		Kurzfristig (akut)	Langfristig (chronisch)	Kurzfristig (akut)	Langfristig (chronisch)	Kurzfristig (akut)	Langfristig (chronisch)
Verbraucher	Lokal	keine Angaben	keine Angaben	keine Angaben	keine Angaben	keine Angaben	keine Angaben
	Systemisch	keine Angaben	keine Angaben	keine Angaben	keine Angaben	keine Angaben	keine Angaben
Arbeitnehmer	Lokal	keine Angaben	keine Angaben	keine Angaben	keine Angaben	10 mg/m ³	5 mg/m ³
	Systemisch	keine Angaben	keine Angaben	keine Angaben	keine Angaben	keine Angaben	keine Angaben

PNEC-Werte		
Kompartiment	Wert	Bemerkung(en)
Süßwasser	keine Angaben	keine Bemerkungen
Meerwasser	keine Angaben	keine Bemerkungen
Süßwassersediment	keine Angaben	keine Bemerkungen
Meerwasser-Sediment	keine Angaben	keine Bemerkungen
Kläranlage (STP)	keine Angaben	keine Bemerkungen
Zeitweilige Freisetzung	keine Angaben	keine Bemerkungen
Sekundärvergiftung	keine Angaben	keine Bemerkungen
Erboden	keine Angaben	keine Bemerkungen

8.2. Begrenzung und Überwachung der Exposition:

Bei gefährlichen Stoffen ohne kontrollierter Konzentrationsgrenze ist der Arbeitgeber verpflichtet, das Ausmaß der Exposition auf dem niedrigsten Niveau zu halten, das durch verfügbare wissenschaftliche und technische Mittel erreicht werden kann und bei dem der Gefahrenstoff keine gesundheitsschädigende Wirkung auf die Arbeiter hat.

8.2.1. Geeignete technische Steuerung:

In Verfolgung der Arbeit ist eine richtige Voraussicht erforderlich, um die Verschütten auf Kleidung und Boden beziehungsweise den Kontakt mit Haut und Augen zu vermeiden.

Die Methoden sind so ausgelegt, dass die Staubkonzentration durch geschlossene Verfahren, lokale Belüftungsabgase oder dergleichen so niedrig wie möglich gehalten wird.

Augenspüleinrichtung am Arbeitsplatz vorsehen.

8.2.2. Individuelle Schutzmaßnahmen, zum Beispiel persönliche Schutzausrüstung:

1. **Augen-/Gesichtsschutz:** Entsprechende Schutzbrille verwenden (EN 166).

2. **Hautschutz:**

a. **Handschutz:** Bei Gefahr eines direkten Kontakts sollten Schutzhandschuhe verwendet werden (EN 374). Empfohlene Handschuhmaterialien: PVC, Neopren und Naturkautschuk.

b. **Sonstige:** Geeignete langärmelige Mäntel / Overalls und Schuhe mit vollständiger Abdeckung verwenden.

3. **Atemschutz:** Bei der Handhabung großer Mengen kann ein Atemschutz erforderlich sein (EN 143). Partikelfilter: P2.

4. **Thermische Gefahren:** Keine thermischen Gefahren bekannt.

8.2.3. Begrenzung und Überwachung der Umweltexposition:

Freisetzung in die Umwelt vermeiden.

Die Voraussetzungen unter Abschnitt 8 setzen sachkundige Arbeiten voraus und gelten nur unter normalen Bedingungen und Verwendung des Produkts. Bei abweichenden Bedingungen, oder die Arbeit unter extremen Konditionen ausgeführt wird, ist es sinnvoll einen Experten zu konsultieren, und erst danach über die notwendigen Vorsichtsmaßnahmen und weiteren Vorkehrungen zu entscheiden.

ABSCHNITT 9: PHYSIKALISCHE UND CHEMISCHE EIGENSCHAFTEN

9.1. Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften:

Parameter	Wert / Testmethode / Anmerkungen
1. Aussehen:	Feststoff/Pulver/Granulat weiß, grau (die Substanz kann kleine Eisenverunreinigungen enthalten, die je nach Oxidationszustand des Eisens selbst eine leichte Färbung des Endprodukts verursachen (cremefarben, gelb, rosa))
2. Geruch:	geruchlos
3. Geruchsschwelle:	keine Angaben*
4. pH:	keine Angaben*
5. Schmelzpunkt/Gefrierpunkt:	782 °C (101,3 kPa)
6. Siedebeginn und Siedebereich:	> 1600 °C
7. Flammpunkt:	nicht relevant
8. Verdampfungsgeschwindigkeit:	nicht anwendbar
9. Entzündbarkeit (fest, gasförmig):	nicht entzündbar
10. Obere/untere Entzündbarkeits- oder Explosionsgrenzen:	nicht anwendbar
11. Dampfdruck:	nicht relevant
12. Dampfdichte:	nicht relevant
13. Relative Dichte:	2,15 (20 °C)
14. Löslichkeit(en):	löslich in Wasser, 745 g/l (20 °C)
15. Verteilungskoeffizient: n-Octanol/Wasser:	nicht relevant für Calciumchlorid, da es sich in Wasser zersetzt (Halbwertszeit weniger als 12 Stunden)
16. Selbstentzündungstemperatur:	nicht relevant
17. Zersetzungstemperatur:	keine Angaben*
18. Viskosität:	nicht relevant (Feststoff)
19. Explosive Eigenschaften:	nicht explosiv
20. Oxidierende Eigenschaften:	nicht oxidierend.

9.2. Sonstige Angaben:

Keine Angaben verfügbar.

*: Der Hersteller hat keine Prüfungen an diesem Parameter des Produkts durchgeführt oder die Ergebnisse der Prüfungen sind zum Zeitpunkt der Veröffentlichung des Datenblattes nicht verfügbar.

ABSCHNITT 10: STABILITÄT UND REAKTIVITÄT

10.1. Reaktivität:

Das Produkt ist bei normaler Handhabung und Lagerung nicht reaktiv.

10.2. Chemische Stabilität:

Das Produkt ist bei normaler Handhabung und Lagerung stabil.

10.3. Möglichkeit gefährlicher Reaktionen:

Calciumchlorid kann mit Wasser heftig reagieren.

10.4. Zu vermeidende Bedingungen:

Den Stoff während der Lagerung keiner Feuchtigkeit aussetzen.

10.5. Unverträgliche Materialien:

Das Produkt kann mit starken Oxidations- / Reduktionsmitteln reagieren.

Das Produkt kann in einer wässrigen Lösung gegenüber Metallen korrosiv sein.

10.6. Gefährliche Zersetzungsprodukte:

Keine gefährlichen Zersetzungsprodukte bekannt.

ABSCHNITT 11: TOXIKOLOGISCHE ANGABEN

11.1. Angaben zu toxikologischen Wirkungen:

Akute Toxizität: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

Ätz-/Reizwirkung auf die Haut: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

Schwere Augenschädigung/-reizung: Verursacht schwere Augenreizung.

Sensibilisierung der Atemwege/Haut: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

Keimzell-Mutagenität: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

Karzinogenität: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

Reproduktionstoxizität: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

STOT-einmaliger Exposition: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

STOT-wiederholter Exposition: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

Aspirationsgefahr: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

11.1.1. **Kurzfassungen der Informationen aus dem durchgeführten Test:**

Keine Angaben verfügbar.

11.1.2. **Angaben zu toxikologischen Wirkungen:**

Calciumchlorid (CAS: 10043-52-4):

LD₅₀ (oral, Ratte): 2301 mg/kg

LD₅₀ (dermal, Kaninchen): >5000 mg/kg

Keine ätzende / reizende Wirkung auf die Haut (OECD 404).

Wiederholter und längerer Kontakt kann zu Austrocknung der Haut führen.

Das Produkt reizt die Augen (OECD 405).

Beim Einatmen kann der Staub die oberen Atemwege und die Lunge reizen.

Aspirationsgefahr: Nicht relevant, da das Produkt keine Flüssigkeit ist.

11.1.3. **Prüfdaten über mögliche Expositionswege:**

Verschlucken, Einatmen, Haut- und Augenkontakt.

11.1.4. **Symptome im Zusammenhang mit den physikalischen, chemischen und toxikologischen Eigenschaften:**

Keine Angaben verfügbar.

11.1.5. **Verzögert und sofort auftretende Wirkungen sowie chronische Wirkungen nach kurzer oder lang anhaltender Exposition:**

Verursacht schwere Augenreizung.

11.1.6. **Wechselwirkungen:**

Keine Angaben verfügbar.

11.1.7. **Fehlen spezifischer Daten:**

Keine Angaben.

11.1.8. **Sonstige Angaben:**

Keine Angaben verfügbar.

ABSCHNITT 12: UMWELTBEZOGENE ANGABEN

12.1. **Toxizität:**

Das Produkt ist nicht als umweltgefährdend eingestuft und es wird nicht erwartet, dass es negative Auswirkungen auf die Umwelt hat. Es sollte jedoch nach guten Industriestandards gehandhabt werden.

Calciumchlorid (CAS: 10043-52-4):

LC₅₀ (Pimephales promelas): 4630 mg/l/96h

EC₅₀ (Daphnia magna): 2400 mg/l/48h

IC₅₀ (Pseudokirchneriella subcapitata): >4000 mg/l/72h

12.2. **Persistenz und Abbaubarkeit:**

Für anorganische Substanzen muss kein biologischer Abbautest durchgeführt werden.

Es wird jedoch nicht erwartet, dass Calciumchlorid eine Photolyse oder einen biologischen Abbau erfährt.

12.3. **Bioakkumulationspotenzial:**

Calciumchlorid wird leicht in Calcium- und Chloridionen dissoziiert und beide Ionen sind wesentliche Bestandteile des Körpers aller Tiere. Wenn also eine große Menge aufgenommen würde, wird es vom Körper kontrolliert. Eine Bioakkumulation von Calciumchlorid ist daher nicht zu erwarten.

12.4. Mobilität im Boden:

Calciumchlorid ist wasserlöslich und sein Dampfdruck ist vernachlässigbar. Aufgrund seiner Dissoziationseigenschaften und seiner hohen Wasserlöslichkeit, es wird nicht erwartet, dass Calciumchlorid im Boden absorbiert wird. In Bezug auf das Verhalten von Kalzium im Boden kann das Kalziumion an Bodenpartikel binden oder mit Sulfat- und Carbonationen stabile anorganische Salze bilden. Das Chloridion ist im Boden mobil und fließt schließlich in das Oberflächenwasser ab, da es sich leicht in Wasser löst.

12.5. Ergebnisse der PBT- und vPvB-Beurteilung:

Die Kriterien für PBT und vPvB gelten nicht für anorganische Substanzen (Calciumchlorid).

12.6. Andere schädliche Wirkungen:

Keine Angaben verfügbar.

ABSCHNITT 13: HINWEISE ZUR ENTSORGUNG

13.1. Verfahren der Abfallbehandlung:

Entsorgung gemäß den örtlichen Vorschriften.

13.1.1. Informationen bezüglich der Entsorgung des Produkts:

In Übereinstimmung mit den geltenden Vorschriften der Entsorgung zu führen.
Einleiten in Abflüsse, Wasserläufe usw. verhindern.

Abfallverzeichnis:

Für dieses Produkt kann keine Abfallverzeichnis-Nummer (LoW-Code) festgelegt werden, da erst der Verwendungszweck durch den Verbraucher eine Zuordnung erlaubt. Die LoW-Code ist nach Absprache mit dem Entsorger festzulegen.

13.1.2. Angaben zur Entsorgung der Verpackung:

In Übereinstimmung mit den geltenden Vorschriften der Entsorgung zu führen.
Ungereinigte Verpackung wie Produkt entsorgen.

Vollständig entleerte Verpackungen können als allgemeiner Abfall behandelt und verbrannt werden (Energierückgewinnung).
Vollständig entleerte und gereinigte Verpackungen können als allgemeiner Abfall behandelt und verbrannt werden.

Abfallverzeichnis:

15 01 02 Verpackungen aus Kunststoff

13.1.3. Physikalische/chemische Eigenschaften die möglichen Verfahren der Abfallbehandlung beeinflussen können:

Keine Angaben verfügbar.

13.1.4. Entsorgung über das Abwasser:

Keine Angaben verfügbar.

13.1.5. Besondere Vorsichtsmaßnahmen für die empfohlene Abfallbehandlung:

Keine Angaben verfügbar.

ABSCHNITT 14: ANGABEN ZUM TRANSPORT

ADR/RID; ADN; IMDG; IATA:

Unterliegt nicht den Vereinbarungen der Beförderung gefährlicher Güter.

14.1. UN-Nummer:

Keine UN-Nummer.

14.2. Ordnungsgemäße UN-Versandbezeichnung:

Keine ordnungsgemäße Versandbezeichnung.

14.3. Transportgefahrenklassen:

Keine Transportgefahrenklassen.

14.4. Verpackungsgruppe:

Keine Verpackungsgruppe.

14.5. Umweltgefahren:

Keine weitergehende Information verfügbar.

14.6. Besondere Vorsichtsmaßnahmen für den Verwender:

Keine weitergehende Information verfügbar.

14.7. Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code:

Nicht anwendbar.

ABSCHNITT 15: RECHTSVORSCHRIFTEN

15.1. Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch:

VERORDNUNG (EG) Nr. 1907/2006 des Europäischen Parlaments und des Rates vom 18. Dezember 2006 zur Registrierung, Bewertung, Zulassung und Beschränkung chemischer Stoffe (REACH), zur Schaffung einer Europäischen Chemikalienagentur, zur Änderung der Richtlinie 1999/45/EG und zur Aufhebung der Verordnung (EWG) Nr. 793/93 des Rates, der Verordnung (EG) Nr. 1488/94 der Kommission, der Richtlinie 76/769/EWG des Rates sowie der Richtlinien 91/155/EWG, 93/67/EWG, 93/105/EG und 2000/21/EG der Kommission

VERORDNUNG (EG) Nr. 1272/2008 des Europäischen Parlaments und des Rates vom 16. Dezember 2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen, zur Änderung und Aufhebung der Richtlinien 67/548/EWG und 1999/45/EG und zur Änderung der Verordnung (EG) Nr. 1907/2006

VERORDNUNG (EU) Nr. 2015/830 DER KOMMISSION vom 28. Mai 2015 zur Änderung der Verordnung (EG) Nr. 1907/2006 des Europäischen Parlaments und des Rates zur Registrierung, Bewertung, Zulassung und Beschränkung chemischer Stoffe (REACH)

Das Produkt enthält keine Stoffe, die in REACH-Anhang XIV (Zulassungsliste) oder in der EU-Kandidatenliste für Stoffe mit besonders besorgniserregenden Stoffen (SVHC) in Konzentrationen $\geq 0,1\%$ (w / w) aufgeführt sind.

Das Produkt unterliegt keinen Einschränkungen gemäß REACH, Anhang XVII.

15.2. Stoffsicherheitsbeurteilung: Für Calciumchlorid wurde eine Stoffsicherheitsbeurteilung durchgeführt.

ABSCHNITT 16: SONSTIGE ANGABEN

Angaben für die überarbeiteten Sicherheitsdatenblätter: Keine Angaben.

Literaturhinweise / Datenquellen:

Sicherheitsdatenblatt des Herstellers (02. 10. 2020, EN).

Relevante Gefahrenhinweise (Kodierung und vollständiger Text) der Abschnitte 2 und 3:

H319 – Verursacht schwere Augenreizung.

Schulungshinweise: Für die Benutzer dieses Produkts sollte eine Schulung vorgesehen sein, die für die Eigenschaften des Produkts und die identifizierte Verwendung relevant ist.

Volltext der Abkürzungen in dem Sicherheitsdatenblatt:

ADN: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf Binnenwasserstraßen.

ADR: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße.

ATE: Schätzwert Akuter Toxizität.

AOX: Adsorbierbare organische Halogenverbindungen.

BCF: Biokonzentrationsfaktor.

BOD: Biologischer Sauerstoffbedarf.

CAS Nummer: Nummer des Chemical Abstract Service.

CLP: Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen.

CMR-Eigenschaften: Karzinogene, mutagene, reproduktionstoxische Wirkungen.

COD: Chemischer Sauerstoffbedarf.

CSA: Stoffsicherheitsbeurteilung.

CSR: Stoffsicherheitsbericht.

DNEL: Derived-No-Effect-Level.

ECHA: Europäische Chemikalienagentur.

EC: Europäische Gemeinschaft (EG).

EG-Nummer: EINECS- und ELINCS-Nummern (siehe auch EINECS und ELINCS) (EG-Nummer).

EEC: Europäische Wirtschaftsgemeinschaft (EWG).

EEA: Europäischer Wirtschaftsraum (EWR) (EU + Island, Liechtenstein und Norwegen).

EINECS: Europäische Verzeichnis der auf dem Markt befindlichen chemischen Stoffe.
ELINCS: Europäische Liste der angemeldeten chemischen Stoffe.
EN: Europäische Norm.
EU: Europäische Union.
EWC: Europäischer Abfallkatalog (ersetzt durch LoW - siehe unten).
GHS: Global Harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien.
IATA: Internationale Flug-Transport-Vereinigung.
ICAO-TI: Technische Anweisungen für den sicheren Transport gefährlicher Güter in der Luft.
IMDG: Internationale Seetransport gefährlicher Güter.
IMSBC: Internationale maritime Schüttgutladungen.
IUCLID: Internationale einheitliche chemische Informationsdatenbank.
IUPAC: Internationale Union für reine und angewandte Chemie.
Kow: n-Octanol/Wasser Verteilungskoeffizient.
LC50: Tödliche Konzentration, die zu einer Sterblichkeit von 50% führt.
LD50: Tödliche Dosis, die zu einer Sterblichkeit von 50% führt (mittlere letale Dosis).
LoW: Abfallverzeichnis.
LOEC: Geringste Konzentration, bei der eine Wirkung festgestellt wird.
LOEL: Geringste Dosis, bei der eine Wirkung festgestellt wird.
NOEC: Konzentration ohne beobachtbare Wirkung.
NOEL: Dosis ohne beobachtbare Wirkung.
NOAEC: Konzentration ohne beobachtbare schädliche Wirkung.
NOAEL: Dosis ohne beobachtbare schädliche Wirkung.
OECD: Organisation für wirtschaftliche Zusammenarbeit und Entwicklung.
OSHA: Arbeitssicherheit und Gesundheitsschutz.
PBT: Persistent, bioakkumulierbar und toxisch.
PNEC: Abgeschätzte Nicht-Effekt-Konzentration.
QSAR: Quantitative Struktur-Aktivitäts-Beziehung.
REACH: Verordnung Nr. 1907/2006/EG zur Registrierung, Bewertung, Zulassung und Beschränkung chemischer Stoffe.
RID: Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr.
SCBA: Umluftunabhängiges Atemschutzgerät.
SDB: Sicherheitsdatenblatt.
STOT: Spezifische Zielorgan-Toxizität.
SVHC: Besonders besorgniserregende Stoffe.
UN: Vereinte Nationen.
UVCB: Stoffe mit unbekannter oder variabler Zusammensetzung, komplexe Reaktionsprodukte und biologische Materialien.
VOC: Flüchtige organische Verbindungen.
vPvB: Sehr persistent und sehr bioakkumulierbar.

Dieses Sicherheitsdatenblatt wurde auf der Basis von durch den Hersteller/Vertreiber gegebenen Informationen erstellt und entspricht den maßgeblichen Vorschriften.

Die Informationen, Daten und Empfehlungen, die hierin enthalten sind, stammen aus zuverlässigen Quellen, sind nach Treu und Glauben gegeben und werden zum Zeitpunkt der Ausführung für richtig und genau gehalten. Es kann jedoch keine Zusicherung über die Vollständigkeit der Informationen gegeben werden.

Das Sicherheitsdatenblatt soll nur als Leitfaden für die Handhabung des Produkts dienen. Zur Verwendung und Benutzung des Produkts können andere Überlegungen auftreten oder notwendig sein.

Die Benutzer werden darauf hingewiesen, die Angemessenheit und die Anwendbarkeit der oben gegebenen Information für ihre besonderen Umstände und Zwecke abzuwägen und alle Risiken der Produktverwendung zu unterstellen.

Der Verwender ist verpflichtet, alle geltenden rechtlichen Vorschriften zu befolgen, die sich auf die Handhabung dieses Produktes beziehen.

Sicherheitsdatenblatt erstellt von:
MSDS-Europe
der internationale Geschäftszeitung von
ToxInfo Kft.

Professionelle Hilfe in Bezug auf die Erklärung
des Sicherheitsdatenblattes:
+36 70 335 8480; info@msds-europe.com
www.msds-europe.com



SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		1 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

EXPOSURE SCENARIO FOR CALCIUM CHLORIDE	
No.	Short title
ES 1	Formulation or re-packing
ES 2	Use at industrial sites; Various sectors (SU 1, SU 2a, SU 2b, SU 4, SU 5, SU 6b, SU 8, SU 9, SU 11, SU 12, SU 13, SU 14, SU 15, SU 16, SU 17)
ES 3	Widespread use by professional workers; Various sectors (SU 0, SU 1, SU 13, SU 19, SU 20)
ES 4	Widespread use by professional workers; Various sectors (SU 0, SU 1, SU 5, SU 13, SU 19, SU 20)
ES 5	Consumer use; PC 0, 2

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		2 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

ES 1: Formulation or re-packing

Title section

ES name: Formulation or re-packing; Distribution of substance

Environment	
1: Formulation into mixture	ERC 2
Worker	
2: <i>Chemical production in closed process without likelihood of exposure or in containment conditions.</i>	PROC 1
3: <i>Chemical production in closed continuous process with occasional controlled exposure.</i>	PROC 2
4: <i>Formulation in closed batch processes with occasional controlled exposure.</i>	PROC 3
5: <i>Chemical production where opportunity for exposure arises</i>	PROC 4
6: <i>Mixing or blending in batch processes</i>	PROC 5
7: <i>Transfer of a substance or mixture during process sampling at dedicated facilities</i>	PROC 8b, PROC 26
8: <i>Transfer of a substance or mixture during process sampling at non-dedicated facilities</i>	PROC 8a, PROC 26
9: <i>Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</i>	PROC 9, PROC 26
10: <i>Use as laboratory reagent</i>	PROC 15, PROC 26
11: <i>Tabletting, compression, extrusion, pelettisation, granulation</i>	PROC 14
12: <i>Transfer of substance or mixture (charging/discharging) at non dedicated-facilities</i>	PROC 8a, PROC 26
13: <i>Transfer of substance or mixture (charging/discharging) at dedicated-facilities</i>	PROC 8b, PROC 26
14: <i>Equipment cleaning and maintenance at non-dedicated facility</i>	PROC 8a, PROC 28
15: <i>Manual maintenance (cleaning and repair) of machinery</i>	PROC 28

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		3 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Conditions of use affecting exposure

Control of worker exposure

Conditions of use applicable to all contributing scenarios

Product (article) characteristics
Covers concentrations up to 100 %
<i>Solid, medium dustiness. Covers also liquid form</i>
Technical and organisational conditions and measures
Assumes that activities are undertaken with appropriate and well maintained equipment by trained personnel operating under supervision.
Conditions and measures related to personal protection, hygiene and health evaluation
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.
<i>Use suitable eye protection.</i>
Other conditions affecting workers exposure
Indoor use
Assumes process temperature up to 20 °C

Specific conditions of use per contributing scenario

Contributing scenario	Specific conditions of use
<i>Chemical production in closed process without likelihood of exposure or in containment conditions. (PROC 1)</i>	Covers use up to 8 h/day Provide a basic standard of general ventilation (1 to 3 air changes per hour).
<i>Chemical production in closed continuous process with occasional controlled exposure. (PROC 2)</i>	Covers use up to 8 h/day Provide a basic standard of general ventilation (1 to 3 air changes per hour).

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		4 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Formulation in closed batch processes with occasional controlled exposure. (PROC 3)	Covers use up to 8 h/day Provide a basic standard of general ventilation (1 to 3 air changes per hour).
Chemical production where opportunity for exposure arises (PROC 4)	Covers use up to 8 h/day Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). <i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i>
Mixing or blending in batch processes (PROC 5)	Covers use up to 8 h/day Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). <i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i>
Transfer of a substance or mixture during process sampling at dedicated facilities (PROC 8b, PROC 26)	Covers use up to 8 h/day Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).
Transfer of a substance or mixture during process sampling at non-dedicated facilities (PROC 8a, PROC 26)	Covers use up to 1 h/day Provide a basic standard of general ventilation (1 to 3 air changes per hour). <i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i>
Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC 9, PROC 26)	Covers use up to 8 h/day Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). <i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i>
Use as laboratory reagent (PROC 15, PROC 26)	Covers use up to 8 h/day Provide a basic standard of general ventilation (1 to 3 air changes per hour).
Tabletting, compression, extrusion, pelettisation, granulation (PROC 14)	Covers use up to 8 h/day Provide a basic standard of general ventilation (1 to 3 air changes per hour).

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		5 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Transfer of substance or mixture (charging/discharging) at non dedicated-facilities (PROC 8a, PROC 26)	<p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p><i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i></p>
Transfer of substance or mixture (charging/discharging) at dedicated-facilities (PROC 8b, PROC 26)	<p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p>
Equipment cleaning and maintenance at non-dedicated facility (PROC 8a, PROC 28)	<p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p><i>Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]</i></p> <p><i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i></p>
Manual maintenance (cleaning and repair) of machinery (PROC 28)	<p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p><i>Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]</i></p> <p><i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i></p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		6 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Exposure estimation and reference to its source

Worker exposure: Chemical production in closed process without likelihood of exposure or in containment conditions. (PROC 1)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.01 mg/m ³ (TRA Workers 3.0)	< 0.01
Inhalation, local, acute	0.04 mg/m ³ (TRA Workers 3.0)	< 0.01

Worker exposure: Chemical production in closed continuous process with occasional controlled exposure. (PROC 2)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.5 mg/m ³ (TRA Workers 3.0)	0.1
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Formulation in closed batch processes with occasional controlled exposure. (PROC 3)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	1 mg/m ³ (TRA Workers 3.0)	0.2
Inhalation, local, acute	4 mg/m ³ (TRA Workers 3.0)	0.4

Worker exposure: Chemical production where opportunity for exposure arises (PROC 4)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Mixing or blending in batch processes (PROC 5)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		7 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Worker exposure: Transfer of a substance or mixture during process sampling at dedicated facilities (PROC 8b, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Transfer of a substance or mixture during process sampling at non-dedicated facilities (PROC 8a, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.1 mg/m ³ (TRA Workers 3.0)	0.02
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC 9, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Use as laboratory reagent (PROC 15, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.5 mg/m ³ (TRA Workers 3.0)	0.1
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Tableting, compression, extrusion, pelettisation, granulation (PROC 14)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	1 mg/m ³ (TRA Workers 3.0)	0.2
Inhalation, local, acute	4 mg/m ³ (TRA Workers 3.0)	0.4

Worker exposure: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities (PROC 8a, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		8 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Worker exposure: Transfer of substance or mixture (charging/discharging) at dedicated-facilities (PROC 8b, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Equipment cleaning and maintenance at non-dedicated facility (PROC 8a, PROC 28)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.5 mg/m ³ (TRA Workers 3.0)	0.1
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Manual maintenance (cleaning and repair) of machinery (PROC 28)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.5 mg/m ³ (PROC 8a estimate used to cover PROC 28)	0.1
Inhalation, local, acute	2 mg/m ³ (PROC 8a estimate used to cover PROC 28)	0.2

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		9 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

ES 2: Use at industrial sites; Various sectors (SU 1, SU 2a, SU 2b, SU 4, SU 5, SU 6b, SU 8, SU 9, SU 11, SU 12, SU 13, SU 14, SU 15, SU 16, SU 17)

Title section

ES name: *Use at industrial site (e.g. Industrial Indoor use as Process aid, Industrial Outdoor use)*

Sector of use: Agriculture, forestry, fishery (SU 1), Mining (without offshore industries) (SU 2a), Offshore industries (SU 2b), Manufacture of food products (SU 4), Manufacture of textiles, leather, fur (SU 5), Manufacture of pulp, paper and paper products (SU 6b), Manufacture of bulk, large scale chemicals (including petroleum products) (SU 8), Manufacture of fine chemicals (SU 9), Manufacture of rubber products (SU 11), Manufacture of plastics products, including compounding and conversion (SU 12), Manufacture of other non-metallic mineral products, e.g. plasters, cement (SU 13), Manufacture of basic metals, including alloys (SU 14), Manufacture of fabricated metal products, except machinery and equipment (SU 15), Manufacture of computer, electronic and optical products, electrical equipment (SU 16), General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment. (SU 17)

Environment	
1: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)	ERC 4
Worker	
2: <i>Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions</i>	PROC 1
3: <i>Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</i>	PROC 2
4: <i>Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</i>	PROC 3
5: Chemical production where opportunity for exposure arises	PROC 4
6: Mixing or blending in batch processes	PROC 5
7: Calendering operations	PROC 6

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		10 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

8: <i>Transfer of a substance or mixture during process sampling at non-dedicated facilities with a local exhaust ventilation</i>	PROC 8a, PROC 26
9: <i>Transfer of a substance or mixture during process sampling at non-dedicated facilities without a local exhaust ventilation</i>	PROC 8a, PROC 26
10: <i>Transfer of a substance or mixture during process sampling at dedicated facilities with a local exhaust ventilation</i>	PROC 8b, PROC 26
11: <i>Transfer of a substance or mixture during process sampling at dedicated facilities without a local exhaust ventilation</i>	PROC 8b, PROC 26
12: <i>Transfer of substance or mixture (charging/discharging) at non-dedicated facilities with a local exhaust ventilation.</i>	PROC 8a, PROC 26
13: <i>Transfer of substance or mixture (charging/discharging) at non-dedicated facilities without a local exhaust ventilation.</i>	PROC 8a, PROC 26
14: <i>Transfer of substance or mixture (charging/discharging) at dedicated facilities with a local exhaust ventilation.</i>	PROC 8b, PROC 26
15: <i>Transfer of substance or mixture (charging/discharging) at dedicated facilities without a local exhaust ventilation.</i>	PROC 8b, PROC 26
16: <i>Equipment cleaning and maintenance at non-dedicated facility</i>	PROC 8a, PROC 28
17: <i>Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities with a local exhaust ventilation</i>	PROC 9, PROC 26, PROC 27b
18: <i>Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities without a local exhaust ventilation</i>	PROC 9, PROC 26
25: <i>Tabletting, compression, extrusion, pelettisation, granulation</i>	PROC 14
26: <i>Use as laboratory reagent</i>	PROC 15, PROC 26, PROC 27b
27: <i>Open processing and transfer operations at substantially elevated temperature (\leq melting point - Medium fugacity)</i>	PROC 23, PROC 27a
28: <i>Open processing and transfer operations at substantially elevated temperature ($>$ melting point - High fugacity)</i>	PROC 23, PROC 27a
29: <i>Manual maintenance (cleaning and repair) of machinery at non-dedicated facilities</i>	PROC 28

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		11 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Conditions of use affecting exposure

Control of worker exposure

Conditions of use applicable to all contributing scenarios

Technical and organisational conditions and measures
Assumes that activities are undertaken with appropriate and well maintained equipment by trained personnel operating under supervision.
Conditions and measures related to personal protection, hygiene and health evaluation
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.
<i>Use suitable eye protection.</i>
Other conditions affecting workers exposure
Assumes process temperature up to 20 °C

Specific conditions of use per contributing scenario

Contributing scenario	Specific conditions of use
Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions (PROC 1)	Covers concentrations up to 100 % <i>Solid, medium dustiness. Covers also liquid form</i> Covers use up to 8 h/day Provide a basic standard of general ventilation (1 to 3 air changes per hour). Indoor use
Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC 2)	Covers concentrations up to 100 % <i>Solid, medium dustiness. Covers also liquid form</i> Covers use up to 8 h/day Provide a basic standard of general ventilation (1 to 3 air changes per hour). Indoor use
Manufacture or formulation in closed batch processes with occasional controlled exposure	Covers concentrations up to 100 % <i>Solid, medium dustiness. Covers also liquid form</i>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		12 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

or processes with equivalent containment condition (PROC 3)	<p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Indoor use</p>
Chemical production where opportunity for exposure arises (PROC 4)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 90 %</p> <p>Indoor use</p>
Mixing or blending in batch processes (PROC 5)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.</p> <p>Outdoor use</p>
Calendering operations (PROC 6)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p><i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i></p> <p>Indoor use</p>
Transfer of a substance or mixture during process sampling at non-dedicated facilities with a local exhaust ventilation (PROC 8a, PROC 26)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 1 h/day</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 90 %</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Indoor use</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		13 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

<p><i>Transfer of a substance or mixture during process sampling at non-dedicated facilities without a local exhaust ventilation (PROC 8a, PROC 26)</i></p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 1 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p><i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i></p> <p>Indoor use</p>
<p><i>Transfer of a substance or mixture during process sampling at dedicated facilities with a local exhaust ventilation (PROC 8b, PROC 26)</i></p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 95 %</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Indoor use</p>
<p><i>Transfer of a substance or mixture during process sampling at dedicated facilities without a local exhaust ventilation (PROC 8b, PROC 26)</i></p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Indoor use</p>
<p><i>Transfer of substance or mixture (charging/discharging) at non-dedicated facilities with a local exhaust ventilation. (PROC 8a, PROC 26)</i></p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 90 %</p> <p>Indoor use</p>
<p><i>Transfer of substance or mixture (charging/discharging) at non-dedicated facilities without a local exhaust ventilation. (PROC 8a, PROC 26)</i></p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		14 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

	<p><i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i></p> <p>Indoor or outdoor use</p>
<p>Transfer of substance or mixture (charging/discharging) at dedicated facilities with a local exhaust ventilation. (PROC 8b, PROC 26)</p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 95 %</p> <p>Indoor use</p>
<p>Transfer of substance or mixture (charging/discharging) at dedicated facilities without a local exhaust ventilation. (PROC 8b, PROC 26)</p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Indoor or outdoor use</p>
<p>Equipment cleaning and maintenance at non-dedicated facility (PROC 8a, PROC 28)</p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 90 %</p> <p><i>Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]</i></p> <p>Indoor use</p>
<p>Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities with a local exhaust ventilation (PROC 9, PROC 26, PROC 27b)</p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 90 %</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		15 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

	Indoor use
Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities without a local exhaust ventilation (PROC 9, PROC 26)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p><i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i></p> <p>Indoor or outdoor use</p>
Tabletting, compression, extrusion, pelettisation, granulation (PROC 14)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Indoor use</p>
Use as laboratory reagent (PROC 15, PROC 26, PROC 27b)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Indoor use</p>
Open processing and transfer operations at substantially elevated temperature (= < melting point - Medium fugacity) (PROC 23, PROC 27a)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Indoor use</p>
Open processing and transfer operations at substantially elevated temperature (> melting point - High fugacity) (PROC 23, PROC 27a)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a good standard of controlled ventilation (5 to 10 air changes per hour).</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 90 %</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		16 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

	Indoor use
Manual maintenance (cleaning and repair) of machinery at noon-dedicated facilities (PROC 28)	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p> <p>Covers use up to 8 h/day</p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of %</p> <p><i>Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]</i></p> <p>Indoor use</p>

Exposure estimation and reference to its source

Worker exposure: Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions (PROC 1)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.01 mg/m ³ (TRA Workers 3.0)	< 0.01
Inhalation, local, acute	0.04 mg/m ³ (TRA Workers 3.0)	< 0.01

Worker exposure: Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC 2)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.5 mg/m ³ (TRA Workers 3.0)	0.1
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC 3)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	1 mg/m ³ (TRA Workers 3.0)	0.2
Inhalation, local, acute	4 mg/m ³ (TRA Workers 3.0)	0.4

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		17 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Worker exposure: Chemical production where opportunity for exposure arises (PROC 4)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Mixing or blending in batch processes (PROC 5)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Calendering operations (PROC 6)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Transfer of a substance or mixture during process sampling at non-dedicated facilities with a local exhaust ventilation (PROC 8a, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.1 mg/m ³ (TRA Workers 3.0)	0.02
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Transfer of a substance or mixture during process sampling at non-dedicated facilities without a local exhaust ventilation (PROC 8a, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.1 mg/m ³ (TRA Workers 3.0)	0.02
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Transfer of a substance or mixture during process sampling at dedicated facilities with a local exhaust ventilation (PROC 8b, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.05 mg/m ³ (TRA Workers 3.0)	0.01
Inhalation, local, acute	0.2 mg/m ³ (TRA Workers 3.0)	0.02

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		18 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Worker exposure: Transfer of a substance or mixture during process sampling at dedicated facilities without a local exhaust ventilation (PROC 8b, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	1 mg/m ³ (TRA Workers 3.0)	0.2
Inhalation, local, acute	4 mg/m ³ (TRA Workers 3.0)	0.4

Worker exposure: Transfer of substance or mixture (charging/discharging) at non-dedicated facilities with a local exhaust ventilation. (PROC 8a, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Transfer of substance or mixture (charging/discharging) at non-dedicated facilities without a local exhaust ventilation. (PROC 8a, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Transfer of substance or mixture (charging/discharging) at dedicated facilities with a local exhaust ventilation. (PROC 8b, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.035 mg/m ³ (TRA Workers 3.0)	< 0.01
Inhalation, local, acute	0.14 mg/m ³ (TRA Workers 3.0)	0.014

Worker exposure: Transfer of substance or mixture (charging/discharging) at dedicated facilities without a local exhaust ventilation. (PROC 8b, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Equipment cleaning and maintenance at non-dedicated facility (PROC 8a, PROC 28)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.5 mg/m ³ (TRA Workers 3.0)	0.1

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		19 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities with a local exhaust ventilation (PROC 9, PROC 26, PROC 27b)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) at facilities without a local exhaust ventilation (PROC 9, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.5 mg/m ³ (TRA Workers 3.0)	0.1
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Tableting, compression, extrusion, pelettisation, granulation (PROC 14)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	1 mg/m ³ (TRA Workers 3.0)	0.2
Inhalation, local, acute	4 mg/m ³ (TRA Workers 3.0)	0.4

Worker exposure: Use as laboratory reagent (PROC 15, PROC 26, PROC 27b)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.5 mg/m ³ (TRA Workers 3.0)	0.1
Inhalation, local, acute	2 mg/m ³ (TRA Workers 3.0)	0.2

Worker exposure: Open processing and transfer operations at substantially elevated temperature (= < melting point - Medium fugacity) (PROC 23, PROC 27a)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	1 mg/m ³ (TRA Workers 3.0)	0.2
Inhalation, local, acute	4 mg/m ³ (TRA Workers 3.0)	0.4

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		20 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Worker exposure: Open processing and transfer operations at substantially elevated temperature (> melting point - High fugacity) (PROC 23, PROC 27a)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.03 mg/m ³ (TRA Workers 3.0)	< 0.01
Inhalation, local, acute	0.12 mg/m ³ (TRA Workers 3.0)	0.012

Worker exposure: Manual maintenance (cleaning and repair) of machinery at noon-dedicated facilities (PROC 28)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.5 mg/m ³ (ECETOC TRA Workers)	0.1
Inhalation, local, acute	2 mg/m ³ (ECETOC TRA Workers)	0.2

Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Scaling tool: For the evaluation of spraying activities the ART (Advanced Reach Tool) modeling tool has been used. In case the DU cannot demonstrate safe use with the conditions currently presented in this SDS Annex, the ART modeling Tool can be used as scaling tool.

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		21 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

ES 3: Widespread use by professional workers; Various sectors (SU 0, SU 1, SU 13, SU 19, SU 20)

Title section

ES name: Professional use; Indoor use

Sector of use: Other (SU 0), Agriculture, forestry, fishery (SU 1), Manufacture of other non-metallic mineral products, e.g. plasters, cement (SU 13), Building and construction work (SU 19), Health services (SU 20)

Environment	
1: Indoor use; Professional use	ERC 8a
Worker	
2: <i>Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions</i>	PROC 1
3: <i>Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</i>	PROC 2
4: <i>Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</i>	PROC 3
5: Chemical production where opportunity for exposure arises	PROC 4
6: Mixing or blending in batch processes	PROC 5
7: <i>Transfer of substance or mixture (charging/discharging) at non-dedicated facilities</i>	PROC 8a, PROC 26
8: <i>Transfer of substance or mixture (charging/discharging) at dedicated facilities</i>	PROC 8b, PROC 26
9: <i>Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</i>	PROC 9, PROC 26
10: Use as laboratory reagent	PROC 15, PROC 26

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		22 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

11: Manual activities involving hand contact	PROC 19
12: Use of functional fluids in small devices	PROC 20
13: <i>Equipment cleaning and maintenance at non-dedicated facility</i>	PROC 8a, PROC 28
14: <i>Manual maintenance (cleaning and repair) of machinery at non-dedicated facility</i>	PROC 28

Conditions of use affecting exposure

Control of worker exposure

Conditions of use applicable to all contributing scenarios

Conditions and measures related to personal protection, hygiene and health evaluation
<i>Use suitable eye protection.</i>
Other conditions affecting workers exposure
Indoor use
Assumes process temperature up to 20 °C

Specific conditions of use per contributing scenario

Contributing scenario	Specific conditions of use
<i>Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions (PROC 1)</i>	Covers concentrations up to 100 % Solid, medium dustiness Covers use up to 8 h/day <i>Assumes a good basic standard of occupational hygiene is implemented</i> Provide a basic standard of general ventilation (1 to 3 air changes per hour). Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.
<i>Chemical production in closed continuous process with occasional controlled exposure</i>	Covers concentrations up to 100 % Solid, medium dustiness

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		23 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

<p>or processes with equivalent containment conditions (PROC 2)</p>	<p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
<p>Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC 3)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
<p>Chemical production where opportunity for exposure arises (PROC 4)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 80 %</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
<p>Mixing or blending in batch processes (PROC 5)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		24 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

	<p>Local exhaust ventilation; Inhalation - minimum efficiency of 80 %</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
<p>Transfer of substance or mixture (charging/discharging) at non-dedicated facilities (PROC 8a, PROC 26)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 80 %</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
<p>Transfer of substance or mixture (charging/discharging) at dedicated facilities (PROC 8b, PROC 26)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 80 %</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
<p>Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC 9, PROC 26)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		25 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

	<p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 80 %</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
Use as laboratory reagent (PROC 15, PROC 26)	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
Manual activities involving hand contact (PROC 19)	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of 80 %</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
Use of functional fluids in small devices (PROC 20)	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		26 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

	<p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>
<p>Equipment cleaning and maintenance at non-dedicated facility (PROC 8a, PROC 28)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).</p> <p><i>Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p> <p><i>Respiratory protection (APF of 10) is to be worn in those case where there is potential for peak exposure. Alternatively, good general ventilation with a minimum of 5-10 air changes per air can be applied.</i></p>
<p>Manual maintenance (cleaning and repair) of machinery at non-dedicated facility (PROC 28)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Local exhaust ventilation; Inhalation - minimum efficiency of %</p> <p><i>Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		27 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

	other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.
--	--

Exposure estimation and reference to its source

Worker exposure: Chemical production in closed process without likelihood of exposure or in containment conditions or processes with equivalent containment conditions (PROC 1)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.01 mg/m ³ (TRA Workers 3.0)	< 0.01
Inhalation, local, acute	0.04 mg/m ³ (TRA Workers 3.0)	< 0.01

Worker exposure: Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC 2)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	1 mg/m ³ (TRA Workers 3.0)	0.2
Inhalation, local, acute	4 mg/m ³ (TRA Workers 3.0)	0.4

Worker exposure: Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC 3)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Chemical production where opportunity for exposure arises (PROC 4)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		28 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Worker exposure: Mixing or blending in batch processes (PROC 5)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Transfer of substance or mixture (charging/discharging) at non-dedicated facilities (PROC 8a, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	1.4 mg/m ³ (TRA Workers 3.0)	0.28
Inhalation, local, acute	5.6 mg/m ³ (TRA Workers 3.0)	0.56

Worker exposure: Transfer of substance or mixture (charging/discharging) at dedicated facilities (PROC 8b, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC 9, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Use as laboratory reagent (PROC 15, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Manual activities involving hand contact (PROC 19)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		29 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Worker exposure: Use of functional fluids in small devices (PROC 20)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	1 mg/m ³ (TRA Workers 3.0)	0.2
Inhalation, local, acute	4 mg/m ³ (TRA Workers 3.0)	0.4

Worker exposure: Equipment cleaning and maintenance at non-dedicated facility (PROC 8a, PROC 28)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Manual maintenance (cleaning and repair) of machinery at non-dedicated facility (PROC 28)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (ECETOC TRA Workers)	0.14
Inhalation, local, acute	2.8 mg/m ³ (ECETOC TRA Workers)	0.28

Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Scaling tool: For the evaluation of spraying activities the ART (Advanced Reach Tool) modeling tool has been used. In case the DU cannot demonstrate safe use with the conditions currently presented in this SDS Annex, the ART modeling Tool can be used as scaling tool.

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		30 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

ES 4: Widespread use by professional workers; Various sectors (SU 0, SU 1, SU 5, SU 13, SU 19, SU 20)

Title section

ES name: Professional use; Outdoor use

Sector of use: Other (SU 0), Agriculture, forestry, fishery (SU 1), Manufacture of textiles, leather, fur (SU 5), Manufacture of other non-metallic mineral products, e.g. plasters, cement (SU 13), Building and construction work (SU 19), Health services (SU 20)

Environment	
1: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)	ERC 8d
Worker	
2: Chemical production in closed process without likelihood of exposure or in containment conditions.	PROC 1
3: Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions	PROC 2
4: Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions	PROC 3
5: Chemical production where opportunity for exposure arises	PROC 4
6: Mixing or blending in batch processes	PROC 5
7: Transfer of substance or mixture (charging/discharging) at non-dedicated facilities	PROC 8a, PROC 26
8: Transfer of substance or mixture (charging/discharging) at dedicated facilities	PROC 8b, PROC 26
9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)	PROC 9, PROC 26

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		31 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

10: Use as laboratory reagent	PROC 15, PROC 26
11: Mixing operations; Manual activities involving hand contact	PROC 19
12: <i>Equipment cleaning and maintenance at non-dedicated facility</i>	PROC 8a
13: Use of functional fluids in small devices	PROC 20

Conditions of use affecting exposure

Control of worker exposure

Conditions of use applicable to all contributing scenarios

Other conditions affecting workers exposure
Outdoor use
Assumes process temperature up to 20 °C

Specific conditions of use per contributing scenario

Contributing scenario	Specific conditions of use
<i>Chemical production in closed process without likelihood of exposure or in containment conditions. (PROC 1)</i>	Covers concentrations up to 100 % Solid, medium dustiness Covers use up to 8 h/day <i>Assumes a good basic standard of occupational hygiene is implemented</i> Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. <i>Use suitable eye protection</i>
<i>Chemical production in closed</i>	Covers concentrations up to 100 %

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		32 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

<p>continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC 2)</p>	<p>Solid, medium dustiness Covers use up to 8 h/day <i>Assumes a good basic standard of occupational hygiene is implemented</i> Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. <i>Use suitable eye protection</i></p>
<p>Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions (PROC 3)</p>	<p>Covers concentrations up to 100 % Solid, medium dustiness Covers use up to 8 h/day <i>Assumes a good basic standard of occupational hygiene is implemented</i> Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. <i>Use suitable eye protection</i></p>
<p>Chemical production where opportunity for exposure arises (PROC 4)</p>	<p>Covers concentrations up to 100 % Solid, medium dustiness Covers use up to 8 h/day <i>Assumes a good basic standard of occupational hygiene is implemented</i> Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS. <i>Use suitable eye protection</i></p>
<p>Mixing or blending in batch</p>	<p>Covers concentrations up to 100 %</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		33 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

processes (PROC 5)	<p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p> <p>Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.</p> <p><i>Use suitable eye protection</i></p>
Transfer of substance or mixture (charging/discharging) at non-dedicated facilities (PROC 8a, PROC 26)	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p> <p><i>Use suitable eye protection</i></p> <p>Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.</p>
Transfer of substance or mixture (charging/discharging) at dedicated facilities (PROC 8b, PROC 26)	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		34 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

	<p><i>Use suitable eye protection</i></p> <p>Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.</p>
<p>Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC 9, PROC 26)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p><i>Use suitable eye protection</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p> <p>Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.</p>
<p>Use as laboratory reagent (PROC 15, PROC 26)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p> <p><i>Use suitable eye protection</i></p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		35 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

<p>Mixing operations; Manual activities involving hand contact (PROC 19)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p> <p><i>Use suitable eye protection</i></p> <p>Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.</p>
<p>Equipment cleaning and maintenance at non-dedicated facility (PROC 8a)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p><i>Handle substance within a closed system [ES47] Drain down and flush system prior to equipment break-in or maintenance [E55] Transfer via enclosed lines [E52]</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p> <p><i>Use suitable eye protection</i></p> <p>Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.</p>
<p>Use of functional fluids in small devices (PROC 20)</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p> <p>Covers use up to 8 h/day</p> <p><i>Assumes a good basic standard of occupational hygiene is implemented</i></p> <p>Wear chemically resistant gloves (tested to EN374) in combination with</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		36 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

	<p>'basic' employee training.; If skin contamination is expected to extend to other parts of the body, then these body parts should also be protected with impervious garments in a manner equivalent to those described for the hands.; For further specification, refer to section 8 of the SDS.</p> <p><i>Use suitable eye protection</i></p>
--	--

Exposure estimation and reference to its source

Worker exposure: Chemical production in closed process without likelihood of exposure or in containment conditions. (PROC 1)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	7E-3 mg/m ³ (TRA Workers 3.0)	< 0.01
Inhalation, local, acute	0.028 mg/m ³ (TRA Workers 3.0)	< 0.01

Worker exposure: Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC 2)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions (PROC 3)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Chemical production where opportunity for exposure arises (PROC 4)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		37 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Worker exposure: Mixing or blending in batch processes (PROC 5)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Transfer of substance or mixture (charging/discharging) at non-dedicated facilities (PROC 8a, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Transfer of substance or mixture (charging/discharging) at dedicated facilities (PROC 8b, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC 9, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Use as laboratory reagent (PROC 15, PROC 26)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Mixing operations; Manual activities involving hand contact (PROC 19)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.35 mg/m ³ (TRA Workers 3.0)	0.07

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		38 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, acute	1.4 mg/m ³ (TRA Workers 3.0)	0.14

Worker exposure: Equipment cleaning and maintenance at non-dedicated facility (PROC 8a)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Worker exposure: Use of functional fluids in small devices (PROC 20)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.7 mg/m ³ (TRA Workers 3.0)	0.14
Inhalation, local, acute	2.8 mg/m ³ (TRA Workers 3.0)	0.28

Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance: Application of de-icing agent (mixture of 70% NaCl and 30% of a 20% solution of CaCl₂) assumes a fraction of 0.06 of CaCl₂ in road salt with an annual tonnage of 0.09 tonnes/km for 25 emission days per year. Application of de-icing agent (liquid CaCl₂ brine (max. 35% solution)) assumes a fraction of 0.35 of CaCl₂ in road salt with an annual tonnage of 0.28 tonnes/km for 25 emission days per year. Application of Dust suppressor (solid CaCl₂ (up to 80%)) assumes a fraction of 0.8 of CaCl₂ in road salt with an annual tonnage of 2.4 tonnes/km for 3 emission days per year. Application of Dust suppressor (solid CaCl₂ (up to 37%)) assumes a fraction of 0.37 of CaCl₂ in road salt with an annual tonnage of 1.11 tonnes/km for 3 emission days per year.

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		39 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

ES 5: Consumer use; PC 0, 2

Title section

ES name: Consumer use; Indoor or outdoor use

Product category: Adsorbents (PC 2)

Environment	
1: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)	ERC 8a
2: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)	ERC 8d
Consumer	
3: <i>Humidity adsorbants</i>	PC 0
4: Adsorbents	PC 2

Conditions of use affecting exposure

Control of consumer exposure: *Humidity adsorbants* (PC 0)

Product (article) characteristics
Covers concentrations up to 100 %
<i>Solid, medium dustiness. Covers also liquid form</i>
Amount used (or contained in articles), frequency and duration of use/exposure
Covers use up to 1 events per day
<i>Covers use up to 24 h</i>
Information and behavioral advice for consumers
<i>Requires room with good ventilation</i>
<i>Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.</i>
Other conditions affecting consumers exposure

Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-02	2019-08-31	2013-02-19	-		40 of 40

Absortech Absorpole, Absortop, Absorflex, Absorbag

Release area <= 125 m2

Control of consumer exposure: Adsorbents (PC 2)

Product (article) characteristics
Covers concentrations up to 100 %
<i>Solid, medium dustiness. Covers also liquid form</i>
Amount used (or contained in articles), frequency and duration of use/exposure
Covers use up to 1 events per day
<i>Covers use up to 24 h</i>
Information and behavioral advice for consumers
<i>Requires room with good ventilation</i>
<i>Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.</i>
Other conditions affecting consumers exposure
Release area <= 125 m2

Exposure estimation and reference to its source

Consumer exposure: *Humidity adsorbants* (PC 0)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	5E-3 mg/m ³ (ConsExpo)	< 0.01
Inhalation, local, acute	0.01 mg/m ³ (ConsExpo)	< 0.01

Consumer exposure: Adsorbents (PC 2)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	5E-3 mg/m ³ (ConsExpo)	< 0.01
Inhalation, local, acute	0.01 mg/m ³ (ConsExpo)	< 0.01