

SICHERHEITSDATENBLATT

ABSCHNITT 1: BEZEICHNUNG DES STOFFS BEZIEHUNGSWEISE DES GEMISCHS UND DES UNTERNEHMENS

1.1. Produktidentifikator:

Absorgel

1.2. Relevante identifizierte Verwendungen des Stoffs oder Gemischs 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:

Berlin:	Giftnotruf Berlin Giftnotruf der Charité Universitätsmedizin Berlin Campus Benjamin Franklin, Haus VIII (Wirtschaftsgebäude), UG	Notruf: 030 192 40 Telefax: 030 450 569 901 (Keine Notfall-Anfragen!) E-Mail: giftnotruf@charite.de Hindenburgdamm 30 12203 Berlin
Bonn:	Informationszentrale gegen Vergiftungen Zentrum für Kinderheilkunde, Universitätsklinikum Bonn	Notruf: 0228 192 40 Telefax: 0228 287 332 78 oder 0228 287 333 14 E-Mail: gizbn@ukbonn.de Venusberg-Campus 1 Geb. 30 "ELKI" 53127 Bonn
Erfurt:	Giftinformationszentrum Giftnotruf Erfurt Gemeinsames Giftinformationszentrum der Länder Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen c/o HELIOS Klinikum Erfurt	Notruf: 0361 730 730 Telefax: 0361 730 7317 E-Mail: ggiz@ggiz-erfurt.de Nordhäuser Straße 74 99089 Erfurt
Freiburg:	Vergiftungs-Informations-Zentrale Vergiftungs-Informations-Zentrale Zentrum für Kinder- und Jugendmedizin Universitätsklinikum Freiburg	Notruf: 0761 192 40 Telefax: 0761 270 445 70 E-Mail: Giftinfo@uniklinik-freiburg.de Breisacher Straße 86b 79110 Freiburg
Göttingen:	Giftinformationszentrum-Nord Giftinformationszentrum-Nord der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein (GIZ-Nord) Universitätsmedizin Göttingen - Georg-August- Universität	Notruf: 0551 192 40 (Jedermann) und 383 180 (Fachleute) Telefax: 0551 383 1881 E-Mail: Giznord@giz-nord.de Robert-Koch-Straße 40 37075 Göttingen
Mainz:	Giftinformationszentrum Rheinland-Pfalz/Hessen Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen - Klinische Toxikologie - Universitätsmedizin der Johannes Gutenberg- Universität Mainz	Notruf: 06131 192 40 Infoline: 06131 232 466 Telefax: 06131 232 468 (nicht für Notfälle!) E-Mail: mail@giftinfo.uni-mainz.de (nicht für Notfälle!) Rheinland-Pfalz/Hessen Gebäude 601 Langenbeckstraße 1 55131 Mainz

München:	Giftnotruf Giftnotruf München Abteilung für Klinische Toxikologische und Giftnotruf München, Klinikum rechts der Isar der Technischen Universität München	Notruf: 089 192 40 Telefax: 089 414 047 89 E-Mail: tox@mri.tum.de Ismaninger Straße 22 81675 München
-----------------	--	--

ABSCHNITT 2: MÖGLICHE GEFAHREN

2.1. Einstufung des Stoffs oder Gemischs:

Einstufung gemäß Verordnung (EG) Nr. 1272/2008 (CLP):
Schwere Augenschädigung/-reizung, Gefahrenkategorie 2 – H319

Gefahrenhinweise:

H319 – Verursacht schwere Augenreizung.

2.2. Kennzeichnungselemente:



Gefahrenhinweise:

H319 – Verursacht schwere Augenreizung.

Sicherheitshinweise:

P102 – Darf nicht in die Hände von Kindern gelangen.

P280 – Schutzhandschuhe/Schutzkleidung/Augenschutz/Gesichtsschutz tragen.

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

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

2.3. Sonstige Gefahren:

Kann bei Dispersion ein explosionsfähiges Staub-Luft-Gemisch bilden.

Ergebnisse der PBT- und vPvB-Beurteilung: Das Gemisch enthält keine persistenten, bioakkumulierbaren und toxischen (PBT) oder sehr persistenten und sehr bioakkumulierbaren (vPvB) Stoffe in Konzentrationen $\geq 0,1$ % gemäß Anhang XIII der Verordnung (EG) Nr. 1907/2006.

Endokrinschädliche Eigenschaft: Das Gemisch enthält keine Bestandteile, die gemäß der Delegierten Verordnung (EU) 2017/2100 der Kommission oder der Verordnung (EU) 2018/605 der Kommission in Mengen von 0,1 % oder mehr als endokrinschädigend gelten.

ABSCHNITT 3: ZUSAMMENSETZUNG/ANGABEN ZU BESTANDTEILEN

3.1. **Stoffe:**
Nicht anwendbar.

3.2. **Gemische:**

Bezeichnung	CAS-Nummer	EG-Nummer / ECHA Listennummer	REACH Registrier-nummer	Konz. (%)	Einstufung gemäß Verordnung (EG) Nr. 1272/2008 (CLP)		
					Piktogramm , Kodierung der Signalworte	Gefahrenklasse und Gefahrenkodierung	Kodierung der Gefahrenhinweise
Calciumchlorid Indexnummer: 017-013-00-2	10043-52-4	233-140-8	01-2119494219-28	65 – < 90	GHS07 Achtung	Eye Irrit. 2	H319
Stärke*	9005-25-8	232-679-6	befreit	10 – < 35	-	nicht eingestuft	-

*: Vom Hersteller klassifizierte Substanz, die nicht im VI. Anhang der Verordnung (EG) Nr. 1272/2008 vorkommt.

Es enthält keine anderen Substanzen, die als gesundheits- oder umweltgefährdend gelten oder deren Konzentration nicht den in den einschlägigen Rechtsvorschriften festgelegten Wert erreicht und muss deshalb nicht im Sicherheitsdatenblatt enthalten sein.

Volltext der Gefahrenhinweise: siehe Abschnitt 16.

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:

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

HAUTKONTAKT:

Maßnahmen:

- Kontaminierte Kleidung ausziehen.
- Sofort mit Wasser und Seife waschen.
- 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 und verzögert auftretende Symptome und Wirkungen:**

Einatmen: Kann leichte / vorübergehende Reizungen verursachen.

Hautkontakt: Kann leichte / vorübergehende Reizungen verursachen.

Augenkontakt: Verursacht intensives Brennen und Tränensekretion / Lakrimation.

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 auffegen und dann den gesammelten Abfall in angemessene, beschriftete und verschließbare Behälter für gefährlichen Abfall bis zur angemessenen Entsorgung tun.
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 Gebrauch nicht essen, trinken oder rauchen.
Normale Händehygiene.

Technische Maßnahmen:
Keine besonderen Maßnahmen erforderlich.

Hinweise zum Brand- und Explosionsschutz:
Kann bei Dispersion ein explosionsfähiges Staub-Luft-Gemisch bilden.
- 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 zuletzt geändert und ergänzt: GMBI 2022, S. 469 [Nr. 20-21] (v. 23.06.2022)):

Die Bestandteile des Gemischs sind nicht mit Expositionsgrenzwerten 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
Erdboden	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 Steuerungseinrichtungen:

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 entwickelt, dass die Staubkonzentration durch geschlossene Prozesse und lokale Entnahme möglichst gering bleibt.

Am Arbeitsplatz muss es die Möglichkeit geben, die Augen zu spülen.

8.2.2. Individuelle Schutzmaßnahmen, zum Beispiel persönliche Schutzausrüstung:

1. **Augen-/Gesichtsschutz:** Das Tragen einer Schutzbrille ist erforderlich (EN ISO 16321-1:2022; EN 166).
2. **Hautschutz:**
 - a. **Handschutz:** Bei Gefahr eines direkten Kontakts sollten Schutzhandschuhe verwendet werden (EN 374). Empfohlene Handschuhmaterialien: PVC, Neopren and 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 in Abschnitt 8 genannten Anforderungen setzen sachkundige Arbeit unter normalen Bedingungen und eine zweckentsprechende Verwendung des Produkts voraus. Bei abweichenden Bedingungen oder Arbeiten unter extremen Bedingungen ist vor der Entscheidung über weitere Schutzmaßnahmen der Rat eines Sachverständigen einzuholen.

ABSCHNITT 9: PHYSIKALISCHE UND CHEMISCHE EIGENSCHAFTEN

9.1. Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften:

Parameter	Wert / Testmethode / Anmerkungen
1. Aggregatzustand	fest, Pulver/Granulat
2. Farbe	weiß, grau (die Substanz kann kleine Eisenverunreinigungen enthalten, die je nach Oxidationszustand des Eisens selbst eine leichte Färbung des Endprodukts verursachen (cremefarben, gelb, rosa))
3. Geruch, Geruchsschwelle	geruchlos
4. Schmelzpunkt/Gefrierpunkt	782 °C (101,3 kPa) (Calciumchlorid)
5. Siedepunkt oder Siedebeginn und Siedebereich	>1600 °C (Calciumchlorid)
6. Entzündbarkeit	nicht entzündbar
7. Untere und obere Explosionsgrenze	nicht anwendbar
8. Flammpunkt	nicht relevant
9. Zündtemperatur	nicht relevant
10. Zersetzungstemperatur	keine Angaben*
11. pH-Wert	keine Angaben*
12. Kinematische Viskosität	nicht relevant (Feststoff)
13. Löslichkeit in Wasser in anderen Lösungsmitteln	löslich in Wasser /745 g/l (20 °C) (Calciumchlorid) keine Angaben*
14. Verteilungskoeffizient n-Oktanol/Wasser (log-Wert)	nicht relevant für Calciumchlorid, da es sich in Wasser zersetzt (Halbwertszeit weniger als 12 Stunden)
15. Dampfdruck	nicht relevant
16. Dichte und/oder relative Dichte	2,15 (20 °C) (Calciumchlorid)
17. Relative Dampfdichte	nicht relevant
18. Partikeleigenschaften	keine Angaben*

9.2. Sonstige Angaben:

9.2.1. Angaben über physikalische Gefahrenklassen:

Explosive Eigenschaften: nicht explosiv. Kann bei Dispersion ein explosionsfähiges Staub-Luft-Gemisch bilden.
Oxidierende Eigenschaften: nicht oxidierend.

9.2.2. Sonstige sicherheitstechnische Kenngrößen:

Keine weiteren Kenngrößen 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, oder die Eigenschaft gilt nicht für das Produkt.

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 den Gefahrenklassen im Sinne der Verordnung (EG) Nr. 1272/2008:

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.

Keimzellmutagenität: 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.

Spezifische Zielorgan-Toxizität bei einmaliger Exposition: Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

Spezifische Zielorgan-Toxizität bei 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:

Informationen über das Produkt:

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.

Informationen über die Bestandteile:

Calciumchlorid (CAS: 10043-52-4):

LD₅₀ (oral, Ratte): 2301 mg/kg

LD₅₀ (dermal, Kaninchen): > 5000 mg/kg

Ätz-/Reizwirkung auf die Haut: Keine ätzende / reizende Wirkung auf die Haut (OECD 404).

11.1.3. Angaben zu wahrscheinlichen Expositionswegen:

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.

11.2. Angaben über sonstige Gefahren:

Endokrinschädliche Eigenschaften:

Endokrinschädliche Eigenschaft: Das Gemisch enthält keine Bestandteile, die gemäß der Delegierten Verordnung (EU) 2017/2100 der Kommission oder der Verordnung (EU) 2018/605 der Kommission in Mengen von 0,1 % oder mehr als endokrinschädigend gelten.

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.

Informationen über die Bestandteile:

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 Abbauteil durchgeführt werden.

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

- 12.3. Bioakkumulationspotenzial:**
Kalziumchlorid wird leicht in Kalzium- und Chlor-Ionen dissoziiert. Beide Ionen sind wesentliche Bestandteile des Körpers aller Tiere, sodass eine größere Menge, die aufgenommen wird, vom Körper reguliert wird. 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). Das Gemisch enthält keine persistenten, bioakkumulierbaren und toxischen (PBT) oder sehr persistenten und sehr bioakkumulierbaren (vPvB) Stoffe in Konzentrationen $\geq 0,1$ % gemäß Anhang XIII der Verordnung (EG) Nr. 1907/2006.
- 12.6. Endokrinschädliche Eigenschaften:**
Endokrinschädliche Eigenschaft: Das Gemisch enthält keine Bestandteile, die gemäß der Delegierten Verordnung (EU) 2017/2100 der Kommission oder der Verordnung (EU) 2018/605 der Kommission in Mengen von 0,1 % oder mehr als endokrinschädigend gelten.
- 12.7. 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 zuführen.
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 zuführen.
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:**
Verunreinigte Verpackungen:
15 01 10* Verpackungen, die Rückstände gefährlicher Stoffe enthalten oder durch gefährliche Stoffe verunreinigt sind
*: gefährlicher Abfall.
- Entleerte Verpackungen:**
15 01 01 Verpackungen aus Papier und Pappe
15 01 02 Verpackungen aus Kunststoff
15 01 04 Verpackungen aus Metall
15 01 07 Verpackungen aus Glas
- 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 oder ID-Nummer:**
Keine UN-Nummer.
- 14.2. Ordnungsgemäße UN-Versandbezeichnung:**
Keine ordnungsgemäße UN-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 auf dem Seeweg gemäß IMO-Instrumenten:**
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 (EWG) Nr. 76/769 des Rates sowie der Richtlinien (EWG) Nr. 91/155, (EWG) Nr. 93/67, (EG) Nr. 93/105 und (EG) Nr. 2000/21 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 (EWG) Nr. 67/548 und (EG) Nr. 1999/45 und zur Änderung der Verordnung (EG) Nr. 1907/2006

VERORDNUNG (EU) 2020/878 DER KOMMISSION vom 18. Juni 2020 zur Änderung des Anhangs II 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:

Das Sicherheitsdatenblatt wurde gemäß der Verordnung (EU) Nr. 2020/878 (Abschnitt 1-16) revidiert.
Die Produktzusammensetzung und Gefahreinstufung wurde gegenüber der Vorgängerversion nicht geändert.

Dieses Sicherheitsdatenblatt ersetzt alle früheren Versionen gemäß Anhang II der Verordnung (EG) Nr. 1907/2006.

Literaturhinweise / Datenquellen:

Vorherige Version des Sicherheitsdatenblattes (13. 11. 2020, Version 1).
Sicherheitsdatenblatt des Herstellers (20. 04. 2023, EN).

Methoden für die Einstufung gemäß Verordnung (EG) Nr. 1272/2008:

Einstufung	Methode
Schwere Augenschädigung/-reizung, Gefahrenkategorie 2 – H319	Basierend auf Berechnungsmethode

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

H319 – Verursacht schwere Augenreizung.

Schulungshinweise: Der Nutzer des Produkts sollte hinsichtlich der Eigenschaften und der relevanten Verwendung des Produkts geschult sein.

Volltext der Abkürzungen in dem Sicherheitsdatenblatt:

ADN: Europäisches Übereinkommen über die Internationale Beförderung Gefährlicher Güter auf Binnenwasserstraßen.
ADR: 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).
EC-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.
EuPCS: Europäisches Produktkategorisierungssystem.
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.
IMO: Internationale Schifffahrts-Organisation.
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 Geschäftszweig 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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	1 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	2 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	3 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	4 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	5 of 41

Absorgel

<p>Transfer of substance or mixture (charging/discharging) at non dedicated-facilities (PROC 8a, PROC 26)</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>Transfer of substance or mixture (charging/discharging) at dedicated-facilities (PROC 8b, PROC 26)</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>Equipment cleaning and maintenance at non-dedicated facility (PROC 8a, PROC 28)</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>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>
<p>Manual maintenance (cleaning and repair) of machinery (PROC 28)</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>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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	6 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	7 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	8 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	9 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	10 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	11 of 41

Absorgel

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
<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 % <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
<i>Chemical production in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC 2)</i>	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

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	12 of 41

Absorgel

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

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	13 of 41

Absorgel

	<p>Provide a basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Indoor use</p>
<p>Transfer of a substance or mixture during process sampling at non-dedicated facilities without a local exhaust ventilation (PROC 8a, 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 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>Transfer of a substance or mixture during process sampling 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>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>Transfer of a substance or mixture during process sampling 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 basic standard of general ventilation (1 to 3 air changes per hour).</p> <p>Indoor use</p>
<p>Transfer of substance or mixture (charging/discharging) at non-dedicated facilities with a local exhaust ventilation. (PROC 8a, 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 90 %</p> <p>Indoor use</p>
<p>Transfer of substance or mixture (charging/discharging) at non-dedicated facilities</p>	<p>Covers concentrations up to 100 %</p> <p><i>Solid, medium dustiness. Covers also liquid form</i></p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	14 of 41

Absorgel

<p>without a local exhaust ventilation. (PROC 8a, PROC 26)</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 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</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>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	15 of 41

Absorgel

local exhaust ventilation (PROC 9, PROC 26, PROC 27b)	<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>
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)	<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>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	16 of 41

Absorgel

(PROC 23, PROC 27a)	<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> <p>Indoor use</p>
Manual maintenance (cleaning and repair) of machinery at non-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

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	17 of 41

Absorgel

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

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

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	18 of 41

Absorgel

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

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

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	19 of 41

Absorgel

Route of exposure and type of effects	Exposure estimate	RCR
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: 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

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	20 of 41

Absorgel

Worker exposure: Open processing and transfer operations at substantially elevated temperature (\leq 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

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 non-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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	21 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	22 of 41

Absorgel

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</i>	Covers concentrations up to 100 %

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	23 of 41

Absorgel

<p><i>continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC 2)</i></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>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>Manufacture or formulation in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC 3)</i></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><i>Chemical production where opportunity for exposure arises (PROC 4)</i></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><i>Mixing or blending in batch processes (PROC 5)</i></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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	24 of 41

Absorgel

	<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 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</p>	<p>Covers concentrations up to 100 %</p> <p>Solid, medium dustiness</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	25 of 41

Absorgel

(dedicated filling line, including weighing) (PROC 9, PROC 26)	<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>
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>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	26 of 41

Absorgel

	<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>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</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	27 of 41

Absorgel

'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.

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

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

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	28 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	29 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	30 of 41

Absorgel

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: <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 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 conditions</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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	31 of 41

Absorgel

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 continuous process with occasional controlled exposure</i>	Covers concentrations up to 100 % Solid, medium dustiness Covers use up to 8 h/day

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	32 of 41

Absorgel

<p>or processes with equivalent containment conditions (PROC 2)</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>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 %</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>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>Wear suitable respiratory protection.; Inhalation - minimum efficiency of 90 %; For further specification, refer to section 8 of the SDS.</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>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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	33 of 41

Absorgel

	<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>
<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>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>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>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>Transfer of substance or mixture into small containers</p>	<p>Covers concentrations up to 100 %</p>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	34 of 41

Absorgel

(dedicated filling line, including weighing) (PROC 9, PROC 26)	<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>
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>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>
Mixing operations; 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>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>

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	35 of 41

Absorgel

Equipment cleaning and maintenance at non-dedicated facility (PROC 8a)	<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>
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> <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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	36 of 41

Absorgel

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

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	37 of 41

Absorgel

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
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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	38 of 41

Absorgel

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
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	39 of 41

Absorgel

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: Humidity adsorbants	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

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	40 of 41

Absorgel

<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

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

SAFETY DATA SHEET



Revision date	Replaces	First edition	Art. no	Issued by	Page
2020-10-14	2019-10-23	2013-03-29	-	Absortech Group	41 of 41

Absorgel

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