

2,1,3-BENZOXADIAZOLE-4-CARBALDEHYDE

Page: 1

Compilation date: 07/11/2017

Revision No: 1

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

1.1. Product identifier

Product name: 2,1,3-BENZOXADIAZOLE-4-CARBALDEHYDE

CAS number: 32863-32-4

Product code: OR951625

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

1.3. Details of the supplier of the safety data sheet

Company name: Apollo Scientific Ltd Units 3 & 4 Parkway Denton Manchester M34 3SG UK Tel: 0161 337 9971 Fax: 0161 336 6932 Email: david.tideswell@apolloscientific.co.uk

1.4. Emergency telephone number

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315

Most important adverse effects: Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

2.2. Label elements

Label elements: Hazard statements: H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation. Signal words: Warning Hazard pictograms: GHS07: Exclamation mark



Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection/face protection.

P261: Avoid breathing dust.

P271: Use only outdoors or in a well-ventilated area.

2,1,3-BENZOXADIAZOLE-4-CARBALDEHYDE

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: 2,1,3-BENZOXADIAZOLE-4-CARBALDEHYDE

CAS number: 32863-32-4

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash

immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

Skin contact: There may be irritation and redness at the site of contact.
Eye contact: There may be irritation and redness. The eyes may water profusely.
Ingestion: There may be soreness and redness of the mouth and throat.
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

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

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Carbon dioxide, dry chemical powder, foam. Suitable extinguishing media for the

surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides (NOx).

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

2,1,3-BENZOXADIAZOLE-4-CARBALDEHYDE

Page: 3

7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available.			Page:
downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not create dust. 6.2. Environmental precautions: Do not discharge into drains or rivers. 6.3. Methods and material or containment and cleaning up Clean-up procedures: Transfer to a closable, labelied salvage container for disposal by an appropriate method. 6.4. Reference to other sections: 6.4. Reference to other sections: 6.5. Methods and material storage into drains or rivers. 6.5. Methods and material tor contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage. Fulduing any incompatibilities 7.3. Specific end use(s): Store in a col, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. 8. Sutable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. 8. Store under Argon. 8. Sutable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. 8. Store under Argon. 8. Sutable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. 8. Store under Argon. 8. Sutable packaging: Must only be kept in original packaging. 7. Exposure controls/>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	6.1. Personal precautions, prote	ective equipment and emergency procedures	
contaminated area with signs and prevent access to unauthorised personnel. Do not create dust. 5.2. Environmental precautions: Do not discharge into drains or rivers. 6.3. Methods and material for containment and cleaning up Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method. 6.4. Reference to other sections ection 7: Handling and storage T. Hendling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe handling: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities 7.3. Specific end use(s): Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. ection 8: Exposure controls/Forsonal protection 8.1. Control parameters Vorkplace exposure limits: No data available. DELL/PNEC Values DELL /PNEC No data available. 5. Exposure controls 5. Exposure controls	Personal precautions:	Refer to section 8 of SDS for personal protection details. If outside do not approach from	
create dust. 6.2. Environmental precautions: Do not discharge into drains or rivers. 6.3. Methods and material for containment and cleaning up Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method. 6.4. Reference to other sections ection 7: Handling and storage 7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Specific end use(s) No data available. ection 8: Exposure controls/personal protection 8.1. Control parameters Vorkplace exposure limits: No data available. DNEL/PNEC Values DNEL/PNEC Values CNEL/PNEC values Engineering mesures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protection: Self-contained preatibility apparatus must be available in case of emergency. Respiratory protection: Self-contained preatibility apparatus must be available in case of emergency. Respiratory protection: Wethor solf contained preatibility apparatus must be available in case of emergency. Respiratory protection: Self-contained preatibility apparatus must be available in case of emergency. Respiratory protection: Self-contained preatibility apparatus must be available in case of emergency. Respiratory protection: Self-contained preatibility entities filter.		downwind. If outside keep bystanders upwind and away from danger point. Mark out the	
6.2. Environmental precautions: Do not discharge into drains or rivers. 6.3. Methods and material for containment and cleaning up Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method. 6.4. Reference to other sections: eection 7: Handling and storage ection 7: Handling and storage 7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. ection 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL / PNEC No data available. 8.2. Exposure controls 8. Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Stafey glasses. Ensure eye bath is to hand.		contaminated area with signs and prevent access to unauthorised personnel. Do not	
Environmental precautions: Do not discharge into drains or rivers. 6.3. Methods and material for containment and cleaning up Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method. 6.4. Reference to other sections iection 7: Handling and storage 7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. Section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL / PNEC No data available. 6.2. Exposure controls Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Safety glasses. Ensure eye bath is to hand.		create dust.	
6.3. Methods and material for containment and cleaning up Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method. 6.4. Reference to other sections ection 7: Handling and storage 7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. ection 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values DNEL/PNEC No data available. 8.2. Exposure controls Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Safety glasses. Ensure eye bath is to hand.	6.2. Environmental precautions		
Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method. 6.4. Reference to other sections eection 7: Handling and storage 7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Specific end use(s) No data available. eetion 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC No data available. Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Soff-contained breating apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Stare gloves. Eye protection: Safey glasses. Ensure eye bath is to hand.	Environmental precautions:	Do not discharge into drains or rivers.	
method. 64. Reference to other sections ection 7: Handling and storage 7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): Storage controls/personal protection Becific end use(s): No data available. DNEL/PNEC Not data available. DNEL/PNEC Not data available. DNEL/PNEC Not data available. Engineering measures: Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Res	6.3. Methods and material for c	ontainment and cleaning up	
method. 6.4. Reference to other sections isocion 7: Handling and storage 7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): Specific end use(s): No data available. Everotion 8: Exposure controls/>verotios/ Workplace exposure limits: No data available. DNEL/PNEC Nalues DNEL/PNEC No data available. Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter.	Clean-up procedures:	Transfer to a closable, labelled salvage container for disposal by an appropriate	
Section 7: Handling and storage 7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Specific end use(s): No data available. Section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL / PNEC No data available. 8.2. Exposure controls Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.		method.	
7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. Section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values DNEL / PNEC No data available. Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.	6.4. Reference to other sections	8	
7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. Section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values DNEL / PNEC No data available. Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.	ection 7: Handling and storag	le	
Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Softat available. Section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values No data available. 8.2. Exposure controls Engineering measures: Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Safety glasses. Ensure eye bath is to hand.			
Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Sto data available. Specific end use(s): No data available. ection 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values DNEL/PNEC Values B.2. Exposure controls Ensure there is sufficient ventilation of the area. Respiratory protection Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection Protective gloves. Eye protection Safety glasses. Ensure eye bath is to hand.		-	
use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s):	Handling requirements:		
7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Specific end use(s): Specific end use(s): No data available. section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values DNEL/PNEC No data available. B.2. Exposure controls Engineering measures: Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.			
Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Specific end use(s): Specific end use(s): No data available. ection 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values No data available. B.1. Control parameters: No data available. Morkplace exposure limits: No data available. DNEL/PNEC Values No data available. B.2. Exposure controls Engineering measures: Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.		use in fume hood.	
sensitive. Store under Argon. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Specific end use(s): Specific end use(s): No data available. section 8: Exposure controls//resonal protection Section 8: Exposure controls//resonal protection 8.1. Control parameters No data available. DNEL/PNEC Values No data available. DNEL/PNEC Values No data available. 6.2. Exposure controls Engineering measures: Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.	7.2. Conditions for safe storage	e, including any incompatibilities	
Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Specific end use(s): Specific end use(s): No data available. section 8: Exposure controls/>resonal protection Bata available. 8.1. Control parameters No data available. Workplace exposure limits: No data available. DNEL/PNEC Values No data available. B.2. Exposure controls No data available. B.2. Exposure controls Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protectio: Safety glasses. Ensure eye bath is to hand.	Storage conditions:	Store in a cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture	
7.3. Specific end use(s) Specific end use(s): No data available. Section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values DNEL / PNEC No data available. 8.2. Exposure controls Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.		sensitive. Store under Argon.	
Specific end use(s): No data available. Section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values DNEL / PNEC No data available. 8.2. Exposure controls Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.	Suitable packaging:	Must only be kept in original packaging.	
Section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values DNEL / PNEC No data available. 8.2. Exposure controls Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.	7.3. Specific end use(s)		
8.1. Control parameters Workplace exposure limits: No data available. DNEL/PNEC Values DNEL / PNEC No data available. 8.2. Exposure controls Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.	Specific end use(s):	No data available.	
Workplace exposure limits: No data available. DNEL/PNEC Values DNEL / PNEC DNEL / PNEC No data available. 8.2. Exposure controls Engineering measures: Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.	ection 8: Exposure controls/p	ersonal protection	
DNEL/PNEC Values DNEL / PNEC No data available. 8.2. Exposure controls Engineering measures: Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.	8.1. Control parameters		
DNEL / PNECNo data available.8.2. Exposure controlsEngineering measures:Ensure there is sufficient ventilation of the area.Respiratory protection:Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter.Hand protection:Protective gloves.Eye protection:Safety glasses. Ensure eye bath is to hand.	Workplace exposure limits:	No data available.	
8.2. Exposure controls Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand.	DNEL/PNEC Values		
 Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves. Eye protection: Safety glasses. Ensure eye bath is to hand. 	DNEL / PNEC	No data available.	
Respiratory protection:Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter.Hand protection:Protective gloves.Eye protection:Safety glasses. Ensure eye bath is to hand.	8.2. Exposure controls		
Respiratory protection:Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter.Hand protection:Protective gloves.Eye protection:Safety glasses. Ensure eye bath is to hand.	Engineering measures:	Ensure there is sufficient ventilation of the area.	
protective device with particle filter.Hand protection:Protective gloves.Eye protection:Safety glasses. Ensure eye bath is to hand.			
Hand protection:Protective gloves.Eye protection:Safety glasses. Ensure eye bath is to hand.			
Eye protection: Safety glasses. Ensure eye bath is to hand.	Hand protection:		
		-	

2,1,3-BENZOXADIAZOLE-4-CARBALDEHYDE

Page: 4

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties			
State:	Solid		
Evaporation rate:	No data available.		
Oxidising:	No data available.		
Solubility in water:	No data available.		
Viscosity:	No data available.		
Boiling point/range °C:	No data available.	Melting point/range °C:	108-109
Flammability limits %: lower:	No data available.	upper:	No data available.
Flash point °C:	No data available.	Part.coeff. n-octanol/water:	No data available.
Autoflammability°C:	No data available.	Vapour pressure:	No data available.
Relative density:	No data available.	pH:	No data available.
VOC g/I:	No data available.		

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Conditions to avoid: Heat. Air. Moist air. Humidity.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides

(NOx).

Section 11: Toxicological information

11.1. Information on toxicological effects

2,1,3-BENZOXADIAZOLE-4-CARBALDEHYDE

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations:	Transfer to a suitable container and arrange for collection by specialised disposal
	company. MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL,
	STATE AND FEDERAL REGULATIONS
Disposal of packaging:	Dispose of as special waste in compliance with local and national regulations Observe
	all federal, state and local environmental regulations.
NB:	The user's attention is drawn to the possible existence of regional or national
	regulations regarding disposal.

2,1,3-BENZOXADIAZOLE-4-CARBALDEHYDE

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information:	This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.
	* Data predicted using computational software. The OECD QSAR-Toolbox for grouping
	chemicals into categories. Developed by LMC bulgaria.
	http://echa.europa.eu/support/oecd-qsar-toolbox
	~ Data predicted using computational software ACD/ToxSuite v 2.95.1 Copyright 1994-
	2009 ACD/labs, Copyright 2001-2009 Pharma Algorithms, Inc, Advanced Chemistry
	Development, Inc (ACD/Labs). http://www.acdlabs.com/products/pc_admet/tox/tox/
Phrases used in s.2 and s.3:	H315: Causes skin irritation.
	H319: Causes serious eye irritation.
	H335: May cause respiratory irritation.
Legal disclaimer:	The material is intended for research purposes only and should be handled exclusively
	by those who have been fully trained in safety, laboratory and chemical handling
	procedures. The above information is believed to be correct to the best of our
	knowledge. The above information is believed to be correct to the best of our knowledge
	at the date of its publication, but should not be considered to be all inclusive. It should
	be used only as a guide for safe handling, storage, transportation and disposal. We
	cannot guarantee that the hazards detailed in this document are the only hazards that
	exist for this product. This is not a warranty and Apollo Scientific Ltd shall not be held
	liable for any damage resulting from handling or from contact with the above product.